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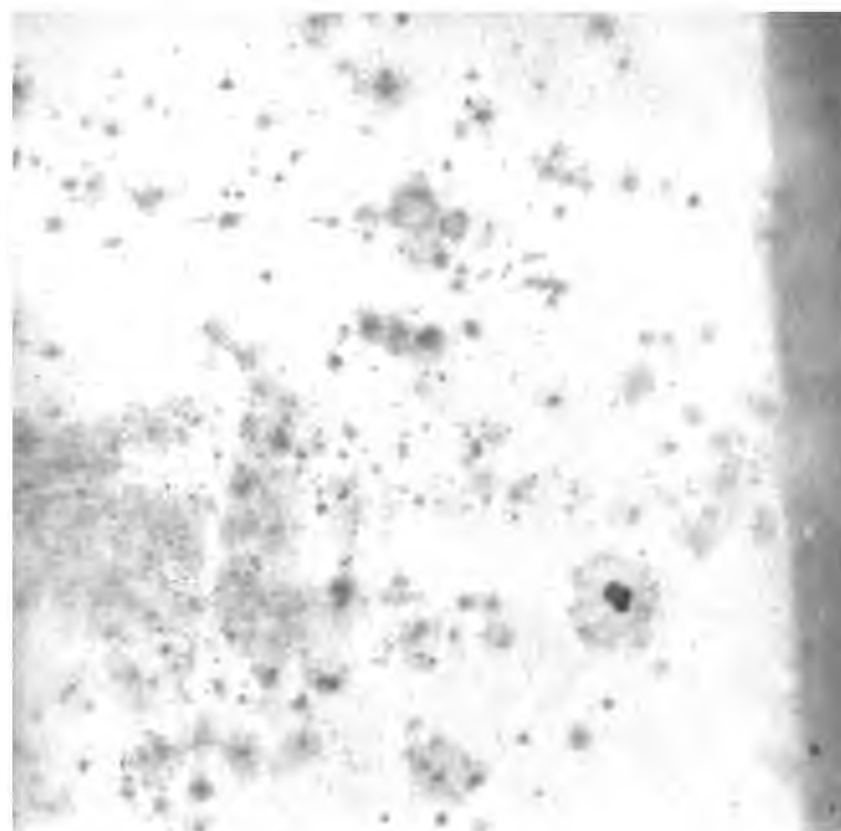
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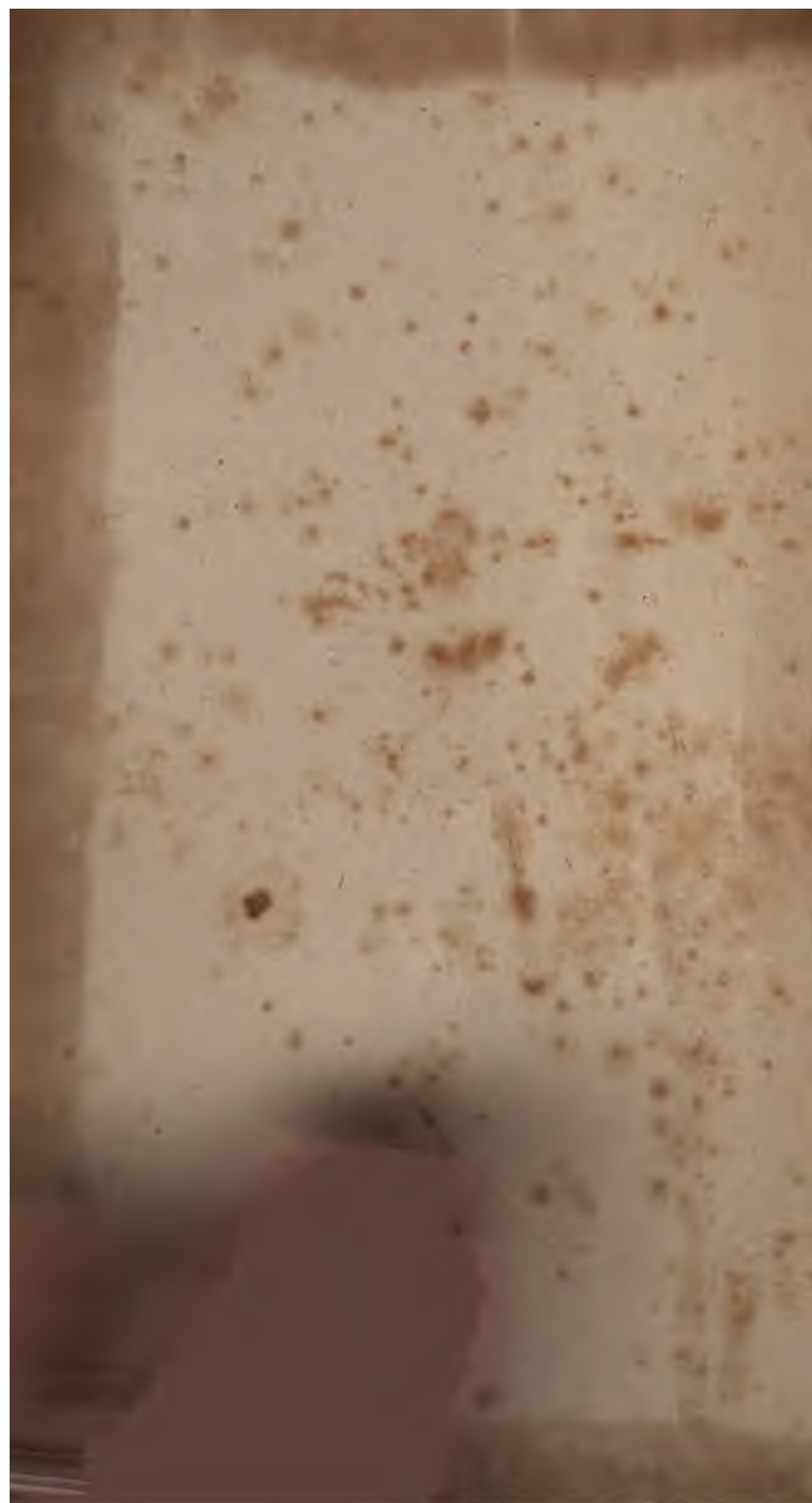
UNIVERSITY OF MICHIGAN,

BY

W. W. MURPHY,

U. S. CONSUL GENERAL, FRANKFORT A. M.











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A NEW SYSTEM

MODERN GEOGRAPHY,

OR A

VIEW OF THE PRESENT STATE

OF

THE WORLD.

WITH AN APPENDIX, CONTAINING STATISTICAL TABLES OF
THE POPULATION, COMMERCE, REVENUE, EXPENDITURE,
DEBT, AND VARIOUS INSTITUTIONS OF THE UNITED
STATES; AND GENERAL VIEWS OF EUROPE AND THE
WORLD.

BY SIDNEY E. MORSE, A. M.

Accompanied with an Atlas.

PUBLISHED

BY GEORGE CLARK, BOSTON; AND HOWE & SPALDING, NEW HAVEN.

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Sept. 1822.

DISTRICT OF MASSACHUSETTS, to WIT:

District Clerk's Office.

BE IT REMEMBERED, That on the twenty-seventh day of August, in the forty-seventh year of the Independence of the United States of America, Sidney F. Morse, A. M. of the said District, has deposited in this Office the Title of a Book, the right whereof he claims as Author, in the words following, to wit:

A New System of Modern Geography, or a View of the Present State of the World. With an Appendix, containing Statistical Tables of the Population, Commerce, Revenue, Expenditure, Debt, and various Institutions of the United States; and General Views of Europe and the World. By Sidney E. Morse, A. M. Accompanied with an Atlas.

By E. M. Moore, A. M. Accompanied with an Engraving.

In conformity to the Act of the Congress of the United States, entitled, "An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts and Books, to the Authors and Proprietors of such Copies, during the times therein mentioned:" and also to an Act entitled, "An Act supplementary to an Act, entitled, An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts and Books, to the Authors and Proprietors of such Copies during the times therein mentioned; and extending the Benefits thereof to the Arts of Designing, Engraving and Etching Historical and other Prints."

JNO. W. DAVIS, { Clerk of the District
of Massachusetts.

PREFACE.

IN the best treatises on Universal Geography in the English language we look in vain for that beautiful order and lucid arrangement which so much delight us in other sciences. In geometry we are presented with a series of propositions connected together in regular order, each growing easily and naturally out of those which preceded it; but in geography, though the subject admits to a considerable extent of the same arrangement, towns, rivers, mountains, colleges, and canals are thrown together without any reference to their natural connection. Such confusion may not seriously incommode the man who is already thoroughly acquainted with the subject, or who consults his geography merely as a book of reference; but the student, who reads the work in course, and whose aim is to get clear and connected views of a whole country, must peruse the description again and again, before he can accomplish his object, even if the materials which are furnished in this loose manner will allow him to do it at all.

The natural order of description seems to require that we should in the first place give the boundaries of a country, the divisions, capes and bays, because these can be perfectly understood without reference to any thing which is to come afterwards, while at the same time the mind, by becoming familiarized with terms which will frequently occur, is prepared in the happiest manner for the subsequent parts of the description. After this preparation, the next step should usually be to describe the face of the country, and especially to draw distinctly the great mountain lines. Rivers should come after mountains, because the course in which they run is commonly determined by

the direction of the ridges. Climate also should be given after mountains, because differences of temperature are usually the effect of different elevations of the surface. Vegetable productions, animals and minerals depend commonly either on the climate or face of the country, and should, therefore, be reserved for the last place in the natural geography. After going through with these heads we are then prepared for an account of the towns, population, religion, government, manufactures, commerce, &c.; and here also we shall find that there is an order to be observed, that there is a connection and dependence of the various heads, which makes it proper that they should follow each other in a particular succession. The effect of this strict adherence to a natural arrangement is greater than at first, perhaps, would be imagined. If we watch the operations of our own minds, we shall perceive that it is exceedingly difficult to remember a catalogue of propositions which appear to have no relation to each other; but if we can connect them together in a regular series, and reason from one to the other, the memory receives them with ease, the impression which they make upon the mind is deep and permanent, and the acquisition of knowledge in this way, becomes easy and delightful.

The method which the author has pursued in preparing the following volume has been, in the first place, to read extensively and minutely the best works to which he had access on the several countries, both in the English and German languages, with a view to obtain a distinct image in his own mind of the natural features of the country; and then, by a proper arrangement of the articles, and an attention to the order in which the particular thoughts are presented, he has endeavoured to communicate this impression as perfectly as possible to the mind of the reader. It has been his aim especially in the introductory views of each grand division of the globe, to give such an outline of its mountains, rivers and other prominent features, as would prepare the student in the best manner for the account of each particular country. He has

PREFACE.

endeavored also to render the descriptions of important towns, harbors, monuments of art, natural curiosities and every other subject that would admit of it, as graphical as possible. It is to be regretted, however, that the materials for such descriptions are in most cases wanting.

From the manner in which the work has been prepared, it would have been impossible to have referred on each page to the different authors from whom the information was derived. The language of others is seldom used, each article being commonly the result of a comparison of all that was read upon the subject. It is believed, however, that a much larger portion of the information has been derived from original sources than is common in works of this nature. Mexico was given almost entirely on the authority of Humboldt. In Buenos Ayres and Chili we have relied chiefly on the valuable documents furnished to our government by the commissioners, who were sent to those countries in 1817, to collect information.* Brazil is described principally from Mawe. Most of the countries of Europe have been given on the authority of the New Edinburgh Gazetteer, and the latest editions of Hassel and Cannabrich. In Asia we have derived considerable assistance from Murray's Historical account of discoveries in Asia, and the description of Hindoostan was principally taken from the interesting article in that work. The recent discoveries in Africa, particularly those of Belzoni in Egypt and Nubia, will be found noticed in their proper places. The regions within the Arctic circle have of late been rendered peculiarly interesting from the discoveries made by Capt. Parry in 1819, a particular notice of which is given under the head of Polar Regions. The account of our own country was principally the result of investigations made by the author during the last year in the preparation of arti-

* Note. Since the sheets containing South America were printed, the government of the United States has acknowledged the independence of Mexico, the republic of Columbia, Buenos Ayres, Chili and Peru.

cles for the third edition of Morse's Universal Gazetteer. The documents consulted in those investigations are too numerous to be mentioned in this place. A catalogue of them is annexed to the preface of the Gazetteer.

The Statistical Tables and General Views at the close of the volume, it is believed, will be found an interesting addition to the work. They contain much valuable information in a narrow compass, and the comparison of the facts which they present will be a very profitable exercise for the student. The knowledge which we obtain from the comparison of such facts is of the most solid and substantial character. To facilitate the study of the tables Remarks and Questions are annexed. The Remarks are intended to explain every thing which needs explanation, and to point out the comparisons which will lead to the most interesting results. The questions are designed to show the manner in which the tables are to be studied; and they are generally so framed as not to require that the numbers should be committed to memory. It has been commonly supposed that the study of statistics must necessarily be dry, but if it is conducted in the manner which is here pointed out, it is believed that it will prove as interesting as it is profitable.

It was originally the intention of the Author to have inserted a System of Ancient Geography in this volume, but upon more mature consideration he has concluded to reserve it for publication in a separate form.

The Atlas which accompanies this work, except the part relating to the United States, is principally a reprint of the latest edition of Arrowsmith.

BOSTON, SEPT. 1822.

INTRODUCTION.

RISE AND PROGRESS OF GEOGRAPHY.

GEOGRAPHY is a term,* derived from the Greek language, and literally signifies *a description of the earth*. It treats of the nature, figure, and magnitude of the earth; the situation, extent, and appearance of different parts of its surface; its productions and inhabitants.

The time when attention was first paid to the pleasing and useful study of geography, is unknown. It seems to be the general opinion, that the Greeks, who were the first cultivators of this science in Europe, received it either from the Egyptians or Babylonians; but it cannot be determined to which of these two nations belongs the honor of having invented it.

Geography was very imperfect in its beginning, and has advanced slowly towards its present degree of perfection. The true figure of the earth was unknown to its first inhabitants, and the earliest opinion seems to have been that, which would most naturally result from the first information given by the senses. It was considered as a large circular plane; and the heavens, in which the sun, moon, and stars appear daily to move from east to west, were supposed not to be elevated to a very great height above it, and to have been created solely for its use and ornament. It is not known who first rejected this erroneous hypothesis, and shewed that the figure of the earth is spherical; but it seems to have been done at a time of remote antiquity.

It appears that the situation of places was first determined according to climates; and that geographers were then guided, in fixing on the climates, by the form and colour of certain animals, which were to be found in different countries. The appearance of Negroes, or what they called Ethiopians, and of the larger sized animals, as the rhinoceros and elephant, suggested to them the northern and southern limits of the torrid zone. A different and more scientific method was used by the Egyptians and Babylonians, who determined the situation of places, or their distance from the equator, by observing *the length of their longest and shortest days*. And these observations were made with a species of sun-dial, having a *stilus* or *gnomon*, erected perpendicularly upon a horizontal plane, by which the length of the shadow of the gnomon, in proportion to its height, might be measured.

It may be conjectured that *travelling*, soon after it began to be much practised in the world, gave rise to a kind of geography.

* Γεωγραφία, from γῆ the earth, and γράφω to describe.

Some, who had performed journeys, made a rough sketch or description of their routes, for the information of others who might afterward wish to travel. The earliest specimen of this kind, of which we have an account, is that of Sesostris, an Egyptian king and conqueror, who, as Eustathius relates, "having traversed great part of the earth, recorded his march in maps, and gave copies of his maps not only to the Egyptians, but to the Scythians, to their great astonishment." Some have imagined that the Jews made a map of the Holy Land, when they gave the different portions to the nine tribes at Shiloh; for Joshua tells us, that they were sent to walk through the land, and that they *described it in seven parts in a book.*

HOMER was first distinguished among the Greeks for his knowledge of the different nations of the earth, and the countries they inhabited. He has described so many places, and with such a degree of accuracy, that Strabo considered him as first among the geographers of ancient times.

A taste for the sciences led THALES, the father of Grecian philosophy, into Egypt, where he lived with the priests. On his return, he taught his countrymen that the earth is globular, and may be divided into five zones, by means of five parallel circles, viz. the equator, the two tropics, and the two polar circles; and that the equator is cut obliquely by the ecliptic, and perpendicularly by the meridian. Thus he made them acquainted with the principal circles of the sphere.* He also taught them, that the year consisted of 365 days, which he learned from the Egyptians.

ANAXIMANDER, a disciple of Thalès, was the author of the first Grecian map on record, which is mentioned by Strabo. The knowledge of the earth was indeed very limited at that time, as it scarcely extended beyond the temperate zone, and did not even comprise the whole of that. The extent of the representation of the world from east to west was twice as great as from south to north; hence the reason, why distances on the earth in the former direction were denominated *longitude*; and those in the latter, *latitude*. Maps were afterwards multiplied.

ERATOSTHENES was the first who introduced a regular parallel of latitude. He began it at the straits of Gibraltar; continued it through the island of Rhodes and the bay of Issus; and extended it to the mountains of India. In drawing this parallel he was regulated by observing where the longest day was $14\frac{1}{2}$ hours, which was afterwards found by Hipparchus to be the latitude of 36 degrees.

Eratosthenes soon after attempted not only to draw other parallels of latitude, but also to trace a meridian at right angles to these, passing through Rhodes and Alexandria down to Syene and Meroe; and, as the progress he thus made naturally tended to enlarge his ideas, he at last, attempted the much more difficult operation of determining the circumference of the globe, by an actual measurement of an arc of one of its great circles. He knew that the sun,

* See Explanation of Terms.



was necessary, in order to give the requisite certainty to his accounts, and is very short in what he relates from others. He was a philosopher, as well as a geographer. Good sense, perspicuity, accuracy, and solidity of judgment, are visible in every part of his works. The geography of Ptolemy is more extensive; it takes in a greater part of the earth, while it seems to be equally circumstantial every where; but this extent renders it liable to more errors. He had the merit of carrying into full execution and practice the invention of Hipparchus, for designating the situation of places on the earth by latitude and longitude, after it had lain dormant upward of 250 years; and thus he greatly advanced the state of the science.

The Roman empire had been enlarged to its greatest extent, and all its provinces well known and surveyed, when Ptolemy, about 150 years after Christ, composed his system of geography. The principal materials used in composing this work were, *the proportions of the gnomon to its shadow*, taken by different astronomers at the times of the equinoxes and solstices; *calculations founded upon the lengths of the longest days*; *the measures or computed distances of the principal roads contained in the Roman surveys and itineraries*; and *the various reports of travellers and navigators*, who often determined the distances of places by hearsay and conjecture. All these were compared together, and digested into one uniform body or system; and were afterwards translated by him, as far as was necessary in adopting the plan of Hipparchus, into the new mathematical language of *degrees and minutes of longitude and latitude*.

The degree of accuracy in the latitudes and longitudes, given by Ptolemy, depended upon the veracity of the facts or suggestions communicated to him, from which they were afterward deduced. We must not therefore be surprised at the multitude of errors to be found there, when his original materials were so imperfect for executing so large a work, as the fixing of the longitudes and latitudes of all the places, coasts, bays, and rivers of the then known world. His system, with all its imperfections, continued in vogue till the beginning of the 17th century; and the capital errors of Ptolemy's work kept their place in all maps, by a sort of unquestioned prescription, down even to that time.

Little was done in geography from the days of Ptolemy to the restoration of learning in Europe; for the Arabian geographers copied and retailed all his principal errors. They observed indeed, under their Caliph Almanon, in the beginning of the ninth century, a degree of latitude on the plains of Shinar near Babylon, and found it equal to $56\frac{2}{3}$ Arabian miles, each of which is 4000 cubits, or 6000 feet; hence they determined the circumference of the earth.

The ancients were acquainted with but a small portion of the earth's surface. On the west, the Atlantic ocean and British isles limited their knowledge. The Fortunate islands, now called the Canaries, were the remotest known lands towards the south. Their notions with regard to the northern countries were very imperfect.

Though Scandinavia was known, yet that and some other countries on the same continent were considered as large islands. It is not easy to determine what place the ancients understood by *Ultima Thule*; many take it for Iceland, but Procopius thinks it was a part of Scandinavia. Their knowledge of Sarmatia and Scythia was far from extending to the sea, which bounds Russia and Great Tartary on the north-east. Their discoveries went no farther than the Riphean mountains, which now divide Russia from Siberia. The western frontier of China seems to have bounded their knowledge on the east. Ptolemy indeed had a very imperfect notion of the southern parts of that extensive empire. How far the ancients extended their discoveries with regard to Africa cannot be certainly known. Some are of opinion, that they were acquainted with the whole coast, having sailed round the southern extremity, now called the Cape of Good Hope, and extended their voyages from the Red Sea to the Mediterranean. Ptolemy, however, supposed that Africa was not surrounded by the sea, but extended in its breadth eastwardly till it joined to India.

In the fifteenth century the Portuguese, animated with the desire of finding a passage to the East-Indies, pushed their enquiries along the western coast of Africa, till they found the Cape of Good Hope, in 1486. In 1497, Vasquez de Gama doubled the Cape, and the next year made a voyage to India, and thus completed the discovery of that country by the east. The passage being thus opened, several European nations, desirous of sharing in the rich commerce of the east, sent their ships to the Indian Sea, where they discovered the Asiatic islands, and penetrated to the empire of Japan. The voyages of the Russians have completed our knowledge of the eastern parts of the continent of Asia.

The Portuguese had just crossed the equator, when CHRISTOPHER COLUMBUS, a native of Genoa, conceived the idea of finding India by a western course. In 1492, he crossed the Atlantic ocean: but, instead of the Indies he discovered the NEW WORLD.

The improvements in geography at the time of the revival of learning in Europe, and since, have been very much owing to the great progress of astronomy. More correct methods and instruments for observing the latitude have been invented; and the discovery of Jupiter's satellites afford a much easier method of finding the longitude, than was formerly known. Solar and lunar eclipses, transits of Mercury and Venus over the sun's disc, and occultations of the fixed stars by the moon, also furnish means for determining longitudes. And since the *lunar tables* were improved by Professor Mayer, and *time keepers* by Mr. Harrison and others, this important object has been obtainable by *measuring distances of the moon from the sun and from certain fixed stars, and by keeping time*. The voyages of different nations brought to our knowledge a vast number of countries utterly unknown before. The late voyages of Capt. Cook and other navigators, together with the travels of Messrs. Bruce, Park, Mackenzie, and many others, contributed greatly to the improvement of geography during the 18th century; so that now the geography of the utmost extremi-

ties of the earth is in a fair way of being much better known to the moderns, than that of the adjacent countries was to the ancients. This science, however, is yet very far from perfection ; and our best maps ought to be considered only as unfinished works, which are to be altered and corrected by farther observations and discoveries.

ASTRONOMY,

AS CONNECTED WITH THE SCIENCE OF GEOGRAPHY.

Astronomy is the science, which treats of the heavenly bodies. By it we learn the figure and dimensions of the earth, and the relative situation of places upon its surface. Hence the propriety of giving a short account of this science in an Introduction to Geography.

EXPLANATION OF TERMS.

Angle. An angle is the space included between two lines, which meet each other.

Circle. A circle is a regular figure, bounded by a curve line, every part of which is equally distant from a point within it, called the *centre*. The *circumference* of a circle is the curve line, which bounds it. The *radius* of a circle is a straight line drawn from the centre to the circumference ; and the *diameter* is a straight line drawn through the centre from one side of the circumference to the other. The circumference of every circle is supposed to be divided into 360 equal parts, called *degrees* ; each degree into 60 *minutes* ; each minute into 60 *seconds*. An *arc* of a circle is part of its circumference. All angles are measured by arcs of circles, or by the number of degrees they contain.

Sphere. A sphere is literally a ball, or globe. By the *celestial sphere* is meant, the apparently *concave* orb, which surrounds the earth, and in which the heavenly bodies appear to be situated at equal distances from the eye. In order to facilitate the knowledge of the places of these bodies in the sphere, several circles are supposed to be described on its surface, and are denominated *circles of the sphere*. The circles of the celestial sphere are supposed to have their centres coincident with the centre of the earth, and to mark correspondent circles on the earth's surface, where their planes cut it ; so that the celestial and terrestrial spheres or globes are considered as concentric, and as having concentric circles on their surfaces.

Great Circles. Great circles are those, whose planes pass through the centre of the sphere, and, of course, divide it into two equal parts. Of these there are four, the *Equator*, the *Ecliptic*, the *Meridian*, and the *Horizon*.

Small Circles. Those circles, whose planes divide the sphere unequally, are called *small circles*. Their planes do not pass through its centre. The two *Tropics*, and the two *Polar Circles*, are *small circles*.

Axis. The axis of the earth, or any heavenly body, is an imaginary straight line passing through the centre, around which it performs its diurnal rotation.

Poles. The poles are the extremities of the axis.

Equator. The Equator is a great circle, whose plane divides the earth and the heavens into northern and southern hemispheres. The axis of the earth makes a right angle with its plane. It is often called the *Equinoctial*; because, when the sun is directly over it, the days and nights are of equal lengths in all parts of the world.

Meridian. The Meridian is a great circle, whose plane divides the earth and the heavens into eastern and western hemispheres. There is an indefinite number of meridians; for all places, that lie east or west of each other, have different meridians. They all pass through the poles of the earth, and cut the equator at right angles. The word meridian is derived from *meridies*, *mid-day*; because, when the sun is on the meridian of any place, it is noon at that place. Geographers usually assume the meridian, which passes through the metropolis of their own country, as the first meridian. But as great inconvenience and confusion result from this practice, the first meridian, throughout the following work, will be that of the Royal Observatory at Greenwich, near London.

Ecliptic. The Ecliptic is a great circle whose plane makes an angle of $23^{\circ} 28'$ with the plane of the equator. Considered as a circle in the heavens, its circumference is the path, which the earth describes annually in its revolution round the sun. The points in which the ecliptic intersects the equator are called the *equinoctial points*; because, when the sun is in either of those points, it shines on both poles, and the day is then equal to the night throughout the earth. The meridian, which passes through these points, is called the *equinoctial colure*. The two points in the ecliptic, which are 90 degrees distant from these, are called the *solstitial points*. The meridian passing through these points is called the *solstitial colure*, and is the only meridian which cuts the ecliptic at right angles. The sun passes through the equinoctial points on the 20th March, and the 23d of September. The former is called the *vernal*; the latter, the *autumnal* equinox. The sun is in the solstitial points on the 21st of June, and the 21st of December. The former is called the *summer*; the latter the *winter* solstice.

The ecliptic is divided into 12 equal parts of 30 degrees each, called *signs*. These begin at the vernal intersection of the ecliptic with the equator, and are numbered from west to east. The names and characters of the signs, with the months in which the sun enters them, are as follows:

Latin names.	English names.	Characters.	Months.
1 Aries	The Ram	♈	March
2 Taurus	The Bull	♉	April
3 Gemini	The Twins	♊	May
4 Cancer	The Crab	♋	June
5 Leo	The Lion	♌	July
6 Virgo	The Virgin	♍	August
7 Libra	The Scales	♎	September
8 Scorpio	The Scorpion	♏	October
9 Sagittarius	The Archer	♐	November
10 Capricornus	The Goat	♑	December
11 Aquarius	The Water Bearer	♒	January
12 Pisces	The Fishes	♓	February

The first six are called *northern* signs ; and the last six *southern*.

Zodiac. The Zodiac is a broad belt in the heavens, 16 degrees wide ; in the middle of which is the ecliptic. It comprehends the orbits of all the planets.

Horizon. The horizon is either *sensible* or *real*. The sensible horizon is the small circle which limits our prospect, where the sky and land or water seem to meet. The real horizon is a great circle, parallel to the former, which divides the earth into upper and lower hemispheres.

The point of the heavens directly over our heads is called the *Zenith* ; and the opposite point, or that directly under our feet, is called the *Nadir*. The straight line connecting these two, passes through the centre of the horizon and is called its axis. The zenith and nadir of any place, therefore, are the poles of its horizon.

Declination. The declination of a heavenly body is its distance north or south of the equator, measured on a meridian.

Tropics. The Tropics are two small circles, drawn parallel to the equator, at the distance of 23° 28' on each side of it. The northern is called the *tropic of Cancer* ; the southern, the *tropic of Capricorn*. The sun never passes these circles ; but, when it has arrived at either, it turns, and goes toward the other. They, of course, bound those places where the sun is vertical.

Polar Circles. The Polar circles are two small circles, parallel to the tropics, described round the poles at the distance of 23° 28' ; that around the north pole is called the *arctic* circle ; that around the south pole, the *antarctic* circle.

A *direct* or *right sphere* is that, where both the poles are in the horizon, and the sun, moon and stars ascend directly above, and descend directly below the horizon. This position is peculiar to those places, which are under the equator.

An *oblique sphere* is that, where all the diurnal motions are oblique to the horizon. This is common to all parts of the earth, except those under the poles and the equator. In an oblique sphere, one of the poles is elevated above, and the other depressed below, the horizon.

A *parallel sphere* is that where the equator and all its parallels are parallel to the horizon. This position is peculiar to those parts which lie directly under the poles.

Zones. Zones are the divisions of the earth's surface, formed by the tropics and polar circles. There are five zones; *one torrid, two temperate, and two frigid zones.*

The torrid zone is that part of the earth's surface included between the two tropics. The equator passes through the middle of this zone. The temperate zones are included between the tropics and the polar circles; and the frigid zones, between the polar circles and the poles.

In every part of the torrid zone the sun is vertical, or directly over the heads of the inhabitants, twice every year, and the days and nights are always nearly equal.

In the temperate zones the sun is never vertical, but rises and sets every 24 hours. The days and nights are unequal, and their inequality increases as you approach the poles.

In the frigid zones, the sun never sets for a certain number of days in summer, and never rises for an equal number in winter. At the poles, the sun is 6 months above, and 6 months below the horizon; of course he rises only once in a year.

The inhabitants of the different zones may be distinguished by the direction in which their shadows fall at noon.—Those who inhabit the torrid zone, have their shadows one part of the year north, and the rest of the year south of them at noon day; but when the sun is vertical, which is twice every year, they have no shadow at noon.

In the temperate zones the shadows at noon always fall one way; in the northern temperate zone they always fall towards the north, and in the southern always towards the south.

At the poles, the sun for six months moves round without setting, and the shadows are in every 24 hours of that period, successively cast towards every point of the horizon.

Climates. The word *climate* has two significations, one *geographical* and the other *astronomical*. In common language, the word is used to denote the difference in the seasons and the temperature of the air. When two places differ in these respects, they are said to be in different climates.

In an *astronomical* sense, a climate is a tract of the earth's surface, included between the equator and a parallel of latitude, or between two parallels, of such a breadth, that the length of the day in one is half an hour longer than in the other. Within the polar circles, however, the breadth of a climate is such, that the length of the longest day, or the longest time of the sun's continuance above the horizon without setting, is a month longer in one parallel, as you proceed towards the elevated pole, than in the other.

There are 30 climates between the equator and either pole. In the first 24, between the equator and either polar circle, the period of increase for every climate is half an hour. In the other six, between either polar circle and its pole, the period of increase for each climate is a month.

Latitude. The latitude of a place is its distance from the equator, reckoned in degrees, &c. north or south, on the meridian. The

greatest latitude is that of the poles, which are 90 degrees distant from the equator. If the place be situated between the equator and the north pole, it is said to be in north latitude; if it lie between the equator and the south pole, it is in south latitude. A parallel of latitude is any small circle parallel with the equator.

The elevation of the pole above the horizon is always equal to the latitude of the place; for to a person situated at the equator, both poles will rest in the horizon. If you travel one, two, or more degrees north, the north pole will rise one, two, or more degrees, and will keep pace with your distance from the equator.

The inhabitants of the earth are sometimes distinguished, according to the several meridians and parallels under which they live.

1. Those who live in the same latitude, and same hemisphere, but under opposite meridians.—Their seasons are the same, as also the length of their days and nights; but when it is mid-day with one, it is midnight with the other.

2. Those who live in the same latitude, and under the same meridian, but in opposite hemispheres. These have noon and midnight at the same time; but the longest day with the one is the shortest with the other; consequently, when it is midsummer with one, it is midwinter with the other.

3. Those who live in the same latitude, but in opposite hemispheres, and under opposite meridians. These are called Antipodes. When it is mid-day with one it is midnight with the other; the longest day with one is the shortest with the other; and consequently, when it is midsummer with the one, it is midwinter with the other.

Longitude. Every place on the surface of the earth has its meridian. The *longitude* of a place is the distance of its meridian from some other fixed meridian, measured on the equator. Longitude is either east or west. All places east of the fixed or first meridian are in east longitude; all west, in west longitude.

Opposition. A body is in *opposition* with the sun, when the earth is directly between it and the sun.

Conjunction. A body is in *conjunction* with the sun, when they are both in a straight line with the earth, on the same side of it. If the body is between the earth and the sun, it is said to be in its *inferior* conjunction; but when the sun is between it and the earth, the body is said to be in its *superior* conjunction.

Quadrature. A body is in *quadrature*, when a line drawn from the centre of the body to the centre of the earth, makes a right angle with a line, drawn from the centre of the earth to the centre of the sun.

Elongation. The greatest elongation of a heavenly body is its greatest apparent distance from the sun.

Eccentricity. The eccentricity of the orbit of a planet is the distance from the sun to the centre of the orbit; the sun not being in the centre, but in one of the foci.

Aphelion. A planet is in its *aphelion*, when it is farthest from the sun.

Perihelion. The perihelion is that point in the orbit of a planet, which is nearest to the sun.

A *Digit* is a twelfth part of the diameter of the sun or moon.

Planets are bodies, which revolve about the sun in orbits nearly circular, whose planes make a very small angle with the plane of the ecliptic ; and with a motion according to the order of the signs of the ecliptic, or from west to east.

Satellites or *moons*, are bodies revolving round the planets, which are called their *primaries* ; and, in company with them, round the sun.

Asteroids are very small bodies, revolving round the sun, in orbits making larger angles with the plane of the ecliptic, and with motions either *direct*, i. e. from west to east ; or *retrograde*, i. e. from east to west.

Comets are bodies revolving about the sun in extremely elliptical orbits ; whose planes may make any angle with the ecliptic, and whose motions are either *direct* or *retrograde*.

THE SOLAR SYSTEM.

The system of heavenly bodies, to which the earth belongs, is composed of the *Sun*, the *Planets*, the *Satellites*, the *Asteroids*, and the *Comets*.

The Sun, the most glorious of the heavenly luminaries, is the source of light, and heat to all the bodies which revolve around it.

The number of Planets is seven ; the names of which according to their nearness to the sun, are *Mercury*, *Venus*, the *Earth*, *Mars*, *Jupiter*, *Saturn*, *Herschel*. The two first are called *inferior* planets ; the four last, *superior*.

The number of *Satellites* is eighteen. The earth has one ; Jupiter four ; Saturn seven ; Herschel six. These revolve round their respective primaries, and accompany them in their annual revolutions round the sun.

The number of *Asteroids* at present known is four. Their orbits lie between those of Mars and Jupiter. Their names, according to their nearness to the sun, are *Ceres*, *Pallas*, *Juno*, and *Vesta*.

The number of *Comets* belonging to our system is not yet ascertained.

Astronomers have, at different periods, supposed the principal bodies, which compose the solar system, arranged in different orders. Such a supposed arrangement is called a *System of the world*. The most distinguished of these systems are the *Ptolemaic*, the *Tychonic*, and the *Copernican*.

The *PTOLEMAIC SYSTEM* is so called from Claudius Ptolemy, a celebrated astronomer of Pelusium in Egypt ; not because he was the author of it, but because he adopted and endeavored to support it. According to this hypothesis, the earth is immoveably fixed in the centre of the universe, and all the other bodies revolve round it from east to west in the space of twenty-four hours, at distances, which increase in the order, in which they are here named,

viz. the Moon, Mercury, Venus, the Sun, Mars, Jupiter, Saturn, and the fixed stars. The sun and planets were supposed to be firmly set in separate crystalline spheres, inclosed by a concave one, containing the fixed stars, which would of course be all equally distant from the earth. Above this starry sphere were imagined to be the two crystalline spheres, the *primum mobile*, communicating motion to all the interior spheres; and, finally, the *empyrean heaven* or *heaven of heavens*, to which a cubic form was attributed. Beside the above motion, performed in the course of twenty-four hours, the sun and planets were supposed to revolve about the earth in certain stated or periodical times, agreeably to their annual appearances.

The phenomena to be explained by this system are inconsistent with it, and show its absurdity in a very satisfactory manner.

The TYCHONIC or BRAHEAN SYSTEM was invented by Tycho Brahe, a nobleman of Denmark. With Ptolemy he supposed the earth to be at rest in the centre of the universe, and the moon, the sun, planets, and fixed stars, to revolve about it in twenty-four hours. He also supposed that these bodies had an annual motion around the earth; that the moon's orbit was nearest to the earth; then the sun's; and that Mercury, Venus, Mars, Jupiter, and Saturn, revolved about the sun as their centre, and accompanied it as their primary in its annual revolution round the earth. As he denied the earth's diurnal rotation on its axis, he was obliged to admit one of the most gross absurdities of the Ptolemaic hypothesis, that is, the revolution of the whole universe, to its farthest visible limits, about the earth's axis in the space of a day, produced by the *primum mobile*. Some of his followers, however, varied from his system so far as to ascribe this apparent diurnal motion of the heavens to a real rotation of the earth on its axis, and were therefore called *Semi-Tychonics*.

The COPERNICAN SYSTEM is so called from Copernicus, a native of Thorn in Royal Prussia, and is the TRUE SOLAR SYSTEM. It had been taught by some of the Pythagorean philosophers, but was nearly lost, when Copernicus undertook to restore it, and published new and demonstrative arguments in its favour. It supposes the sun to be in the centre of the system, and all the planets to move round the sun in the order already mentioned. These, together with the satellites, asteroids, and comets form the constituent parts of the Solar System.

This supposition readily solves all the appearances observable in the motion of the planets, and also agrees with the strictest philosophical and mathematical reasoning.

All the planets are opaque and spherical bodies, and receive their light from the sun. Their orbits are not circular, but elliptical. Hence, in their revolutions, they are sometimes nearer to, and sometimes farther from, that luminary. The influence of the sun is the cause of the motions of the planets; and this influence increases as their distance from the sun decreases. Hence also we see the reason why the planets move faster, as they approach nearer to the sun, and slower as they recede from it.

If a right line, called by some the *vector radius*, be drawn from the sun through any planet, and supposed to revolve round the sun with the planet, this line will describe, or pass over, every part of the plane of the orbit; so that the vector radius may be said to describe the area of the orbit.

In the solar system are observed two principal laws, which regulate the motions of the planets. These laws are the following:

1. "The planets describe equal areas in equal times." That is, the vector radius, in equal portions of time, describes equal areas or portions of the space, contained within the planet's orbit.

2. "The squares of the periodical times of the planets are as the cubes of their mean distances from the sun." That is, as the square of the time, which any planet takes to describe its orbit, is to the square of the time, taken by any other planet to describe its orbit; so is the cube of the mean distance of the former from the sun to the cube of the mean distance of the latter from the sun.

These laws, together with the facts that the orbits of the planets are elliptical, and that they have the sun in a common focus, were discovered by Kepler, a distinguished astronomer, who flourished about the beginning of the seventeenth century, and who deduced them from a multitude of observations; but the first, who shewed the reason of these laws, was the great Sir Isaac Newton.

By the second law the relative distances of the planets from the sun are known; and were the real distance of any one of them determined, the real distance of all the others would be obtained. By the transits of Venus over the sun in 1761 and 1769, we now know the real distances of the planets from the sun much better than before: these, together with other necessary particulars for forming a competent idea of the solar system, are exhibited in Table 1.

The limits to which we are confined will not admit of our introducing the usual proofs to establish the Copernican system.

The Sun. The Sun is the centre of the system, and is immensely larger than all the other bodies which compose it. Its diameter is 883,246 miles, and its density (that of the earth being 1) is nearly $\frac{1}{4}$. It weighs 333,928 times as much as the earth, and is 1,390,000 times as large. It appears from calculation, that a body weighing 1 pound on the earth, would weigh 27.7 pounds on the sun. It revolves, on its axis, in 25 days, 14 hours, 8 minutes; and in its orbit, in the same time, around the common centre of gravity of the system. Its revolution in its orbit, as is that of all the planets, is from west to east. The plane of its orbit is not coincident with that of any of the planets; but is nearest to coincidence with the orbit of Venus. The axis of the sun makes an angle of about $82\frac{1}{2}$ degrees with the plane of the earth's orbit. The sun, though to the naked eye it appears so extremely bright; yet, with a telescope of but very small powers, is discovered to have dark spots on its surface. These are also very various in their magnitudes. That which appeared in 1779, was more than 31,000 miles in diameter, and was visible to the naked eye. The sun has a revolution

on its axis. It is not ascertained whether it has an atmosphere.

Mercury. Mercury is the smallest of the planets. It is 3224 miles in diameter, and 36,583,825 miles from the sun. Its bulk is to that of the earth, nearly as 1 to 15; and its weight, as 0.165 to 1. A body weighing 1 pound on the earth, would weigh 1.03 pounds on Mercury. It is not known whether it revolves on its axis; yet, as all the other planets do, it is naturally concluded that this does also. It revolves round the sun in 87 days, 23 hours; or little less than 3 months. It emits a very bright, white light. Mercury can be seen only a few days at a time. It is visible in the evening about the eastern elongation. It then disappears about 6 or 7 weeks, after which time it may be seen in the morning, rising before the sun. In about 10 weeks, it reappears in the west, setting after the sun. It has no moon, nor any spots on its surface. Its hourly motion in its orbit is 111,000 miles. The heat near the poles of Mercury is not probably greater than that of the torrid zone. Near its equator, water would continually boil, and most inflammable substances would be parched up, destroyed, or converted into vapor.

Venus. This is the most beautiful of the celestial luminaries, and the only star that is ever visible in the day time. This happens once in about 8 years; when the planet is at its greatest north latitude, and near its farthest distance from the sun. Venus is 7687 miles in diameter, and its mean distance from the sun is 68,368,008 miles. Its bulk, compared with that of the earth, is nearly as 8 to 9; and its weight, as 0.89 to 1. A body weighing 1 pound on the earth would weigh 0.98 pounds in Venus. Its diurnal rotation on its axis is performed in 23 hours, 22 minutes, and it moves in its orbit 81,000 miles an hour. When Venus appears to the west of the sun, it rises before him in the morning, and is called the morning star; and when it appears to the east of the sun, it shines in the evening, after the sun sets, and is called the evening star; being in each situation, alternately, about 290 days. The axis of Venus is inclined 75 degrees towards the plane of its orbit.

Mercury and Venus are inferior planets. They are called *inferior* planets in relation to the earth; because they are *below* the Earth; that is nearer to the sun or centre of the system. Mars, Jupiter, Saturn, and Herschel are called *superior* planets, because they are *above* the earth; that is, farther from the centre of the system.

Mercury never appears more than 28° 20' from the sun, nor Venus more than 47° 48'. Of course, they and the sun are never in opposition, i. e. on opposite sides of the earth. They have both, however, an *inferior* conjunction, when they pass between the earth and the sun; and a *superior* conjunction, when they pass behind the sun. In their inferior conjunctions, they sometimes pass directly over the sun's disc. This passage is called a *transit*. In their transits, they appear like small, round, black spots, moving rapidly over the face of the sun. This appearance proves them to be opaque bodies. The transits of Venus are not so frequent as those of Mercury. The last transit of Venus was in 1769; the next will be in 1874.

The last of Mercury was in 1815, and the next will be in 1822. The greatest heat on the planet Venus probably exceeds the heat of the torrid zone about as much, as that exceeds the average heat of 60 degrees north latitude.

The Earth. The Earth is a spherical body. This is obvious from the following considerations: First, From analogy; as all the other planets and heavenly bodies are spherical. Secondly, To people on shore, the mast of a ship appears before the hull; but, were the earth a plane, the hull would appear long before the mast, by reason of the much greater angle which it subtends. Thirdly, The earth has been sailed round by Magellan, Drake, Dampier, Anson, Cook, and many others. Fourthly, The boundary of the earth's shadow upon the moon, in a lunar eclipse, is always circular; and nothing but a spherical body can, in all situations, produce a circular shadow. The unevennesses of the earth's surface have no effect upon its shadow on the moon; for the height of the highest mountain on the globe, is only equal to 1500th part of the earth's diameter.

The earth is not a perfect sphere, but an *oblate spheroid*; that is, its equatorial diameter is longer than its axis. The difference of these diameters is about 34 miles. The mean diameter of the earth, or the diameter in latitude 45 degrees, is 7928 miles. Of course, the equatorial diameter is 7945 miles, and the length of the earth's axis is 7911. The equatorial circumference of the earth is about 24,970 miles; its mean circumference, in latitude 45 degrees, 24,917; and its meridional circumference, 24,863. The number of square miles on the earth's surface is 197,459,101; and 260,909,292,265 is the number of cubic miles contained in the earth. It performs a rotation on its axis once in 24 hours.

The earth is surrounded with a thin, invisible, elastic fluid, called air, the whole body of which forms what is called the *atmosphere*. The density of the air is not always the same, it being subject to be expanded by heat and contracted by cold. In its mean state it is found to be about 850 times lighter than water.

Notwithstanding the seeming inequality in the distribution of light and darkness, it is certain, that, throughout the whole world, there is nearly an equal proportion of light diffused on every part, if we disregard what is absorbed by clouds, vapors, and the atmosphere itself. The equatorial regions have indeed the most intense light during the day, but the nights are long and dark; while on the other hand, in the northerly and southerly parts, though the sun shines less powerfully, yet the length of time that it appears above the horizon, with the longer duration of twilight, makes up for the seeming deficiency.

Mars. The diameter of Mars is 4189 miles, and its mean distance from the sun is 144,000,023 miles. Its annual revolution occupies 1 year, 321 days, 23 hours, 31 minutes, and its rotation on its axis 24 hours, 39 minutes, 22 seconds. It moves in its orbit at the rate of 56,000 miles an hour. Its bulk, compared with that of the earth, is as 7 to 24; and its density, as 7 to 10. One pound on the earth would weigh 0.34 in this planet. Mars is of a fiery

red colour. By the telescope, dark spots are discoverable on its surface; but round its poles, particularly the southern, an intense and permanent brightness. Mars is an oblate spheroid. Its axis is to its equatorial diameter, as 98 to 103. It has an atmosphere of considerable extent.

Jupiter. Jupiter, the largest of the planets, is 89,170 miles in diameter, and 491,702,301 miles from the sun. Its bulk, compared with that of the earth is nearly as 1400 to 1; its density as 5 to 22; and its weight as 312 to 1. One pound on the earth would weigh 2.33lbs. in Jupiter. Its shape is that of an oblate spheroid. Its polar diameter is to that of its equatorial, as 12 to 13; and the difference of their lengths, is upwards of 6000 miles. Its ecliptic and equator are nearly coincident; that is, its axis is nearly perpendicular to the plane of its orbit. Hence this planet has no sensible change of seasons. If its axis were inclined any considerable number of degrees towards the plane of its orbit, just so many degrees round each pole would, in their turn, be almost six years together in total darkness. It revolves on its axis in 9 hours, 55 minutes; and round the sun in 11 years, 314 days, 18 hours, 45 minutes. Its hourly motion in its orbit is 30,000 miles. From a comparison of the most ancient, with the modern observations, there is some reason to conclude, that the period of its revolution is decreasing. Jupiter is surrounded by faint substances, called *belts*. These were discovered in 1665. They are parallel to each other, and to the equator of the planet. The quantity of light and heat enjoyed by Jupiter, is to that enjoyed by the Earth, as 37 to 1000.

Saturn. The diameter of Saturn is 79,042 miles, and its distance from the sun is 901,668,908 miles. Its bulk is proportioned to that of the earth nearly, as 1000 to 1. Its density, as 26 to 288, and its weight, as 98 to 1. A body weighing 1lb. on the earth, would weigh 1.02 on this planet. It is an oblate spheroid, its axis being to its equatorial diameter, as 10 to 11. It revolves on its axis in 10 hours, 16 minutes, 2 seconds, and round the sun in 29 years, 164 days, 7 hours, 21 minutes. Its hourly motion in its orbit is about 22,000 miles. The intensity of the sun's light and heat, is about 95 times greater at the Earth, than at Saturn. This planet has belts discoverable on its disc; but they are not so large or numerous as the belts of Jupiter. The most remarkable appearance, however, is a large ring, entirely separated from the planet itself, and yet completely surrounding it. The plane of the ring coincides with the plane of Saturn's equator, so that the axis of the planet makes a right angle with it. When the outer edge of the ring is turned towards the earth, it is invisible, except with telescopes of very great powers; either on account of its thinness, or of its almost total incapacity to reflect light. The ring is double, or is composed of two rings, having the same plane and the same centre. The outside diameter of the larger ring is 204,883 miles, and its inner diameter 190,248 miles; so that the breadth is 7318 miles. The outside diameter of the smaller ring is 184,393 miles, its inner diameter 146,345, and its breadth 19,024. The space between the rings is 2,977 miles. There is no visible connection

between the two rings. They both, however, revolve on a common axis, in 10 hours, 32 minutes, 15 seconds; a period longer than that of Saturn's rotation by 16 minutes, 13 seconds. The ring is doubtless no less solid than the planet; and it is observed to cast a strong shadow upon it. Its light is also generally brighter than that of the planet. The thickness of the ring is probably less than 1000 miles, and its outer edge is not flat, but spherical. As the planet revolves round the sun, the plane of the ring is always parallel with itself, so that in each Saturnian year, it is twice turned edgewise towards the sun.

Herschel. This planet is called in England *Georgium sidus*, on the continent of Europe, *Uranus*, and generally, in this country, *Herschel*. There is no reason to believe that it had ever been observed by any inhabitant of the Earth before the 13th of March, 1781, when it was discovered by Dr. Herschel. Its diameter is 35,112 miles, and its distance from the sun, is 1,803,534,392. Its hourly motion in its orbit is 16,000 miles. Its bulk, compared with that of the Earth, is nearly as 90 to 1, and its weight as 16.84 to 1. A body on the Earth weighing 1lb. would weigh 0.93lb. in this planet. The period of its revolution round the sun is 83 years, 150 days, 18 hours. It has not yet been determined whether it revolves on an axis. Yet there can be no doubt of this fact, as its shape is that of an oblate spheroid. The quantity of light and heat, communicated to the Earth by the sun, is at least 360 times as great, as that enjoyed by Herschel; and the diameter of the sun, as seen from it, is not more than twice the apparent diameter of the planet Venus, as seen from the Earth. The plane of its orbit is nearly coincident with the plane of the ecliptic. Owing to its immense distance few discoveries have been made respecting it.

Satellites. A satellite, or moon, is a body revolving round a planet, and, in company with the planet, round the sun. Of these there are 18 in our system, distributed in the following manner: 1 to the Earth; 4 to Jupiter; 7 to Saturn; and 6 to Herschel.

The Moon. The moon's diameter is 2180 miles. This is to the diameter of the Earth nearly as 20 to 73. Its surface is to that of the Earth as 1 to $13\frac{1}{2}$; its bulk as 1 to 49; its density as 5 to 4 nearly; and its weight as 1 to 39. Its mean distance from the Earth is 239,029 miles, which is to the sun's mean distance nearly as 1 to 390. The angle which its orbit makes with the ecliptic varies from 5 degrees to 5 18. The moon revolves round the Earth in 27 days, 7 hours, 43 minutes. The interval of time between one new moon and the next, is 29 days, 12 hours, 44 minutes. If the Earth stood still, or had no revolution round the sun, every month would be of the former length; but as the Earth, during a lunar revolution, materially alters its place, it takes the moon 2 days 5 hours to regain what it has lost by the earth's motion. The moon's orbit, to a spectator on the sun, always appears concave. In different parts of its orbit the apparent size of the moon is found to vary. This is owing to the elliptical shape of the orbit. It is found by

observation, that the moon always turns the same side towards the Earth. Hence it must perform a rotation on an axis, and the time of this rotation must be equal to the time of the moon's synodic revolution, or 29 days, 12 hours, 44 minutes. Hence, also, though the lunar year is of equal length with ours, yet it contains only about $12\frac{1}{2}$ days, every lunar day being a little longer than $29\frac{1}{2}$ of our days. The side of the moon, which is towards the Earth, during its day, receives light both from the sun and from the Earth; and, during its night, only the light of the Earth. The other side of the moon has, half of the time, the light of the sun; and the other half is in total darkness. The spots, visible on the moon, are occasioned by the mountains and vallies on its surface. These mountains were formerly supposed to be of a very great height. This, however is a mistake. The highest observed by Herschel, is 7,500 feet. Very few of the others are more than 2500 feet. It is not determined whether the moon has an atmosphere. No clouds or vapours, however, can be discovered near its surface. When the moon is in conjunction with the sun, she is said to be *new*, and is then invisible: As she goes eastward she appears *horned*, till she gets 90 degrees from the sun, when she appears half enlightened, or *dichotomized*; from thence, till she comes into opposition, she appears more than half enlightened or *gibbous*; and at opposition she appears *full*. From opposition to conjunction her apparent bright part decreases, as it before increased. Mr. Bouguer, from experiments on lunar light, concludes that 300,000 moons would not make a stronger light, than that of clear bright sunshine. The light of the moon condensed by the best mirrors produces no sensible effect upon the thermometer. The earth in the course of a month shows the same phases to the lunarians, as the moon does to us; the earth is at the full, at the time of new moon, and new at the time of full moon. The surface of the earth being about 13 times greater than that of the moon, it affords 13 times more light to the moon, than the moon does to us.

It is remarkable, that, when the moon is full, near the middle of September, there is less difference between the times of two successive risings, than there is, when she is full at any other season of the year. By this means she affords an almost immediate supply of light, after sunset, for a whole week together, which is very beneficial at that season for gathering in the fruits of the earth. Hence this full moon is called the *Harvest Moon*.

Eclipses. An eclipse of the moon is caused by its entering into the earth's shadow, and consequently it must happen at the full moon, or when she is in opposition to the sun, as the shadow of the earth must lie opposite to the sun. An eclipse of the sun is caused by the interposition of the moon between the earth and sun, and therefore it must happen when the moon is in conjunction with the sun, or at the new moon.

If the plane of the moon's orbit coincided with the plane of the ecliptic, there would be an eclipse at every conjunction and opposition; but the plane of the moon's orbit being inclined to the plane of the ecliptic, there can be no eclipse at conjunction or opposition, unless at that time the moon be at, or near, the node.

The ecliptic limits of the sun are to those of the moon, as 17 21 to 11 34, or nearly as 3 to 2, and hence there will be more solar than lunar eclipses, in about that ratio. But more lunar than solar eclipses are seen at any given place, because a lunar eclipse is visible to a whole hemisphere of the earth at once; whereas a solar eclipse is visible to a part only, and therefore there is a greater probability of seeing a lunar, than a solar eclipse. Since the moon is as long above the horizon as below, every spectator may expect to see half the number of lunar eclipses which happen.

If the earth had no atmosphere, when the moon was totally eclipsed, she would be invisible; but by the refraction of the atmosphere, some rays will be brought to fall on the moon's surface, on which account the moon is rendered visible, and of a dusky red color.

An eclipse of the moon arising from a real deprivation of light, must appear to begin at the same instant of time to every place on that hemisphere of the Earth, which is next the moon. Hence, it affords a ready method of finding the longitudes of places upon the Earth's surface.

The diameters of the sun and moon are supposed to be divided into 12 equal parts, called *digits*, and an eclipse is said to be so many digits, according to the number of those parts, which are involved at the greatest darkness.

The greatest number of eclipses, which can happen in a year, is seven, and when this happens, five will be of the sun, and two of the moon. The least number which can happen is two, and these must be both solar; for in every year there must be two solar eclipses. The mean number in a year is about four.

In a total eclipse of the sun, the planets, and some of the brightest of the fixed stars have been seen.

Jupiter's Moons. These are four in number, and were discovered by Galileo, Jan. 8, 1600. Their distances from the planet, periodical times, &c. may be learnt from the tables at the close of our account of the solar system. The first and third are larger than the earth: the second and fourth are considerably less than Venus, though larger than Mars. They all revolve on their axis, and also round the planet, from west to east.

The progressive motion and velocity of light was discovered by observations on the satellites of Jupiter. These satellites are eclipsed at regular intervals, and tables of the times when these eclipses are to happen, are constantly published. It is found that, when the earth is exactly between Jupiter and the sun, his satellites appear eclipsed $8\frac{1}{4}$ minutes sooner, than they would be according to the tables; but that, when the earth is at its greatest distance from Jupiter, these eclipses happen about $8\frac{1}{4}$ minutes later, than the tables predict. Hence it follows that light takes up $16\frac{1}{2}$ minutes in passing over the diameter of the earth's orbit, which is about 190 millions of miles. This is nearly at the rate of 200,000 miles a second. By means of these satellites also Jupiter's distance from the earth may be discovered, and the longitudes of places on the earth's surface.

Satellites of Saturn. Of these Huygens discovered the fourth in 1665; Cassini the fifth in 1671, the third in 1672, the first and second in 1684; and Herschel the sixth in 1787, and the seventh in 1788. These last are nearer to Saturn, than the other five; but, to prevent confusion in the numbers with regard to former observations, they are called the sixth and seventh. The tables exhibit their periods and distances from their primary. The third satellite is the largest of all; the first and fourth are nearly of the same size.

Satellites of Herschel. These are six in number. The second and fourth were discovered by Herschel in 1787; and, what is entirely singular in our system, he observed, that their orbits made an angle nearly perpendicular with the ecliptic of the primary. The other four were also discovered by Herschel. The first and fifth in 1790, and the other two in 1794. Their light is extremely faint; but the fourth is somewhat the brightest. The sixth, at its greatest distance, is farther removed from the earth than any body, if we except the comets, that is known to belong to our system. Of all the bodies hitherto described, the satellites of Herschel alone revolve from east to west, or in a retrograde direction.

*Asteroids.** These bodies were entirely unknown, till the commencement of the present century. They appear of the size of stars of the 8th magnitude. It was owing to their diminutive size, that Herschel refused them a place among the planets, and gave them the name of Asteroids, though they are really primary planets, revolving round the sun.

Ceres was discovered by Joseph Piazzi, at the royal observatory at Palermo, January 1, 1801. It appears like a star of the 7th or 8th magnitude. Its diameter is estimated by Dr. Herschel at 160 miles, but this cannot be relied on as exact. All the asteroids are too small to be measured with precision. Their orbits are all between those of Mars and Jupiter. *Ceres* revolves in 4 years, 7 months, 10 days. Its mean distance from the sun is 263,663,000 miles.

Pallas was discovered by Dr. Olbers of Bremen, March 28, 1802. It appears sometimes like a star of the 7th magnitude, and sometimes considerably less. Its diameter is 110 miles. Its periodical revolution is 4 years, 7 months, 11 days; and its distance from the sun 267,438,000 miles. The orbits of *Ceres* and *Pallas* are said to cross each other.

Juno was discovered by Mr. Harding, at Lilienthal, near Bremen, September 1st. 1804. It appears like a star of the 8th magnitude. Its periodical revolution is a little longer than those of *Ceres* and *Pallas*. Its diameter is 113 miles. Its distance from the sun is 286,541,000 miles.

Vesta was discovered by Dr. Olbers, March 29, 1807. It may be seen by the naked eye, like a star of the fifth or sixth magnitude, and very much like the planet *Herschel*. The angle which its diameter subtends, is about half a second. Its periodical revo-

* From *any* star, and *under* appearance.

INTRODUCTION.

lution is 3 years, 2 months, 5 days, and its mean distance, 206,596,000 miles. These elements all require to be corrected by future observations.

TABLE OF ASTEROIDS.

Names.	When discovered.	Periodical time.	Distance from the sun.	Inclination of the Orbit.	Eccentricity.
		y. m. d.		° ' "	
Vesta	March 29, 1807	3 2 5	206,596,000	7 8	0.095
Ceres	January 1, 1801	4 7 10	263,663,000	10 37	0.097
Pallas	March 28, 1802	4 7 11	267,438,000	34 40	0.246
Juno	Septem. 1, 1804	longer than the two last.	286,541,000	21	0.25

Thus, of the 30 bodies, beside the comets, belonging to our system, only eight were known to the ancients; viz, the Sun, Mercury, Venus, the Earth, the Moon, Mars, Jupiter, and Saturn. Of the remaining 22, 4 were discovered in the 16th century; viz. Jupiter's 4 moons, by Galileo: 5 in the 17th century; viz. Saturn's fourth moon by Huygens; and his first, second, third, and fifth, by Cassini: 9 in the 18th century; viz. Saturn's sixth and seventh moons, the planet Herschel, and his six moons, all by Dr. Herschel: and four already in the 19th; viz. Ceres, by Piazzi; Pallas, by Olbers; Juno, by Harding: and Vesta, by Olbers.

Comets. Comets are bodies revolving in very eccentric ellipses about the sun in one of the foci. When a comet is west of the sun, and moving towards it, it is said to be *tailed*; because a train of light follows it, in manner of a *tail*. When the sun and the comet are on opposite sides of the earth, the train is principally hid behind the body of the comet, and the little that appears has the form of a border of hair, or *coma*, whence it is called *hairy*; and whence the name *comet* is derived. The substance of the bodies of comets must be extremely solid, or they would be dissipated in their perihelion, or nearest approach to the sun. According to Sir Isaac Newton, the comet of 1680 endured a heat 28,000 times as great as that of the sun, in midsummer; or about 9,000 times as great as the heat of boiling water; or 2000 times as great as the heat of red hot iron. Little is ascertained respecting the real magnitudes of comets. Their *apparent* magnitudes are also very various. That which appeared in the time of Nero, was, as Seneca relates, apparently as large as the sun; and that of 1652, according to Hevelius, did not seem to be less than the moon, though of a very pale, dim light.

The number of comets belonging to our system has never been ascertained. Conjecture has limited it to 450. The elements of 97 of them have been determined with some degree of accuracy. The angles, which their orbits made with the plane of the ecliptic, were found to vary from 1 to 88 degrees. The perihelion distance

of the comet of 1351, was just equal to the earth's mean distance. The perihelion distance of 24 of the others, was greater than this, and of the remaining 72, less. The least distance of the comet of 1680, was only 122,000 miles from the surface of the sun; while its greatest distance was 12,189,000,000 miles. The perihelion distance of the comet of 1759 is about 52,000,000 miles; its aphelion distance 3,342,500,000. These are the only two comets whose periods are known. That of the latter is about 76 years. It appeared in 1759, 1682, 1607, 1531, and 1456; and will probably re-appear in 1835. The period of the former is 575 years. It appeared in 1680, 1106, 531, and in 44, before Christ, and probably will not re-appear, till 2255. There is also strong reason to conclude, that the comet of 1264 was the same with that of 1556. If so, its period is 292 years; and it ought to appear again in 1848. Dr. Halley imagined, that the comet of 1661 was the same with that of 1532; and that its period was 129 years; but in 1790, it was found to have violated its engagements. Dr. Halley had the honor first to foretel the return of a comet. It was the comet of 1759. The velocity of a comet increases as it approaches the sun. That of 1680, in its perihelion, moved with the amazing velocity of 830,000 miles an hour. The comet of 1744, had a tail of the length of 23,000,000 of miles; and that of 1759, of more than 40,000,000. The orbits of comets make very different angles with the plane of the ecliptic: 50 out of the 97, whose elements have been calculated, had a direct motion, or from west to east; and 47 from east to west. The comet of 1680, on the 11th November, at 1 hour, 6 minutes, P. M. was only 4000 miles north of the orbit of the earth. If the earth at that time, had been in the part of its orbit nearest to the comet, their mutual gravitation must have caused a change in the plane of the earth's orbit, and in the length of our year.

The following tables, taken, with some alterations, from Clarke's Commentary on the Bible, will present a full and interesting summary of the bodies in our solar system, together with their magnitudes, distances, periods, &c.

TABLE I. SUN AND PLANETS.

<i>Names.</i>	<i>Diameter.</i>	<i>Bulk, the Earth being 1.</i>	<i>Weight, the Earth being 1.</i>	<i>Time of rotation on their axis.</i>	<i>Inclination of axis to Equator.</i>	<i>Hourly motion in their orbits.</i>	<i>Weight of 1 lb. on surface.</i>
				<i>l. h. m. s.</i>			
Sun	883,246	1,380,000	333,928	25 14 8 0			27.7
Mercury	3,224	$\frac{1}{8}$	0.165	unknown	unknown	111,256	1.0333
Venus	7,687	$\frac{9}{8}$	0.8899	23 22 0	75° 00'	81,398	0.9771
Earth	7,928	1	1	23 56 4	23 28	75,222	1.0000
Moon	2,180	$\frac{1}{50}$	$\frac{1}{3600}$	27 7 43 5	1 43	2,335	0.1677
Mars	4,189	$\frac{1}{25}$	0.087	1 0 39 22	28 42	56,212	0.3355
Jupiter	89,170	1400	312.1	9 55 33	3 22	30,358	2.3287
Saturn	79,042	1000	97.70	10 16 14	30 00	22,351	1.0154
Sat. Ring	204,883			10 32 15	30 00	22,351	
Herschel	35,111	90	16.84	unknown	unknown	15,846	0.9285

Names.	Mean distances from the sun.	Proportions of Light & Heat.	Inclination of orbits to the Ecliptic.	Periodical Revolution.	Sidereal Revolution.
			° ' "	y. d. h. m. s.	y. d. h. m. s.
Mercury	36,583,825.6	25	7 0 0	0 87 23 14 33	0 87 23 15 40
Venus	68,360,058.2	04	3 23 45	0 224 16 41 27	0 224 16 49 11
Earth	94,507,428.1			1 0 5 43 43	1 0 6 9 12
Moon	94,507,428.1		5 9 0	0 27 7 43 5	0 27 7 43 12
Mars	144,000,023.0	44375	1 51 0	1 321 22 18 27	1 321 23 30 36
Jupiter	491,702,301.0	036875	1 19 15	11 315 14 39	211 317 14 27 11
Saturn	901,668,908.0	01106	2 30 45	29 164 7 21 50	29 176 14 36 43
Sat. Ring	901,668,908.0	01106		29 164 7 21 50	29 176 14 36 43
Herschel	1,303,534,392.0	00276	0 48 0	83 294 8 39 0	84 29 0 29 0

TABLE II. JUPITER'S SATELLITES.

Satellites.	Diam-eter.	Bulk, the Earth being 1.	Distance from Jupiter.	Periodic Revolution.	Synodic Revolution.	Greatest distance from the Earth.
				d. h. m. s.	d. h. m. s.	
I.		1 $\frac{13}{50}$	266,000	1 13 27 33	1 18 28 36	
II.		$\frac{6}{10}$	423,000	3 13 13 42	3 13 17 54	
III.		1 $\frac{2}{3}$	676,000	7 3 42 33	7 3 59 36	
IV.		$\frac{23}{50}$	1,189,000	16 16 32	8 16 18 51	7

TABLE III. SATELLITES OF SATURN.

Satellites.	Distance from Saturn.	Periodic Revolution.	Synodic Revolution.
		d. h. m. s.	d. h. m. s.
VII.	107,000	0 22 37 23	0 22 37 30
VI.	135,000	1 8 53 9	1 8 53 24
I.	170,000	1 21 18 26	1 21 18 55
II.	217,000	2 17 44 51	2 17 45 51
III.	303,000	4 12 25 11	4 12 27 55
IV.	704,000	15 22 41 13	15 23 15 20
V.	2,050,000	79 7 53 42	73 22 3 13

TABLE IV. SATELLITES OF HERSCHEL.

Satellites.	Distance from Herschel.	Periodic Revolution.	Synodic Revolution.
		d. h. m. s.	d. h. m. s.
I.	226,450	5 21 23 22	5 21 25 0
II.	293,053	8 16 57 43	8 17 1 19
III.	342,784	10 22 58 20	10 23 4 0
IV.	392,514	13 10 56 29	13 11 5 1
V.	785,028	38 0 39 4	38 1 49 0
VI.	1,570,057	107 7 35 10	107 16 40 0

OF THE FIXED STARS.

Those stars, which, when seen by the naked eye, or through telescopes, keep constantly in the same situation with respect to each other, are called *fixed stars*. They are easily distinguished from the planets by their twinkling. They appear of various magnitudes. This may arise from their different sizes, or distances, or both. Astronomers have distinguished them, from their apparent magnitudes, into six classes. The *first* contains those of the largest apparent size, the *second* those which appear next in bigness; and so on to the sixth, which includes all those that can just be seen without telescopes. Those, which can be seen only by the help of the telescope, are called *telescopic stars*.

Number of stars of each magnitude.

Place	Magnitudes.						Total.
	1st	2d	3d	4th	5th	6th	
In the Zodiac	5	16	44	120	183	646	1014
In the Northern Hemisphere	6	24	95	200	291	635	1251
In the Southern Hemisphere	9	36	84	190	221	323	865
Total	20	76	223	512	695	1604	3130

The stars in the preceding table are so numerous, that it would be impossible to furnish names for them all and retain those names in the memory. To remedy this inconvenience the ancients distributed them into *constellations*, to which they gave the names of birds, beasts, fishes, &c. from an imaginary resemblance between the forms of the constellations, and of those animals. The stars of each constellation are numbered, according to their magnitude, by the letters of the Greek alphabet. α is the largest, β the second, γ the third, &c. This division of the heavens was very ancient; for some of the constellations are mentioned by Homer and Hesiod, by Amos and Job.

The whole number of the constellations is 90. Of these 48 are ancient, and 42 modern; 33 north of the Zodiac, 12 in the Zodiac, and 45 south of it. Those stars, which have never been arranged into constellations, are called *unformed stars*. Those, whose distance from the nearest pole is less than the latitude of the place, never set below the horizon, and are called *circumpolar stars*. The circles, which they appear to describe in consequence of the earth's rotation, are called *circles of perpetual apparition*. Those stars, whose distance from the farthest pole, is less than the latitude of the place, never rise above the horizon. They also receive the same name; and the circles, which they appear to describe, are called *circles of perpetual occultation*.

The real number of the fixed stars cannot be ascertained. Before the invention of the telescope, it was not supposed to surpass 3000. But since that event it has been found, that the greater the

perfection of that instrument, the greater, in a very high proportion, is the number of the stars, which may be observed. Galileo found 80 stars in the belt of Orion's sword. De Rheita counted 138 in the Pleiades, and more than 2000 in the constellation of Orion, of which only 78 are visible to the naked eye. The fixed stars, as seen through a telescope, are found to be collected in clusters. When a small magnifying power is used, these clusters appear like small light clouds, and hence have been called *nebulae*. Dr. Herschel has given a catalogue of more than 3000 nebulae, which he has discovered. When these nebulae are examined with a telescope of great magnifying power, they are found to consist of immense multitudes of stars. Dr. Herschel is of opinion, that the starry heaven is replete with these nebulae: that each nebula is a distinct and separate system of stars; and that each star is the sun or centre of its own system of planets. That bright, irregular zone, which we call the *Milky Way*, he has very carefully examined, and concludes that it is the particular nebula to which our sun belongs. In examining it, in the space of a quarter of an hour, he has seen the astonishing number of 116,000 stars pass through the field of view of a telescope of only 15' aperture; and, in 41 minutes, he saw 253,000 stars pass through the field of his telescope. It is probable that each nebula in the heavens is as extensive, and as well furnished with stars, as the milky way; that many nebulae, within the reach of the telescope, have not yet been discovered; and that very many more lie beyond its reach, in the remote regions of the universe. If this be true, the number of 75,000,000, which La Lande assigned, as the whole number of the fixed stars, will be seen to fall far short of the truth.

The distance of the fixed stars, however, is so great, that their number will, probably, never be calculated with certainty. The diameter of the earth's orbit is 190,000,000 miles. Of course, when the eye is placed at one end of this diameter, it is so much nearer given stars, than when at the opposite end. Yet this immense distance makes no apparent difference in the size of any of them, nor any difference in their relative situations. The distance of the nearest fixed star is estimated to be more than 5,000,000,000,000 miles from us, a distance which a cannon ball, moving at the rate of 480 miles an hour, would not pass over in less than 1,180,000 years. Astronomers generally, however, have calculated the distance of the *nearest* fixed star, at 400,000 times the diameter of the earth's orbit.

The *real magnitudes* of the fixed stars are not known. In astronomical calculations they are generally supposed to be equal to that of the sun.

With regard to their *nature* we can make nearer approaches to certainty. We know that they shine by their own light, because if they borrowed their light from any large luminous body which was near them, that body would itself be visible. They resemble the sun in several other particulars. Many of them are observed to revolve on an axis; to have spots on their surface, and changeable spots, too, like those of the sun. Hence they are very

fairly concluded to be suns, each one a centre of light, and warmth, and motion for its own system of planets.

THE GLOBES, AND THEIR USE.

A globe is a round body, whose surface is every where equally remote from the centre. But by the *globes*, sometimes called *artificial globes*, is here meant two spherical bodies, whose convex surfaces are supposed to give a true representation of the earth and the apparent heavens. One of these is called the *terrestrial*, the other the *celestial globe*. On the convex surface of the terrestrial globe, all the parts of the earth and sea are delineated in their relative size, form, and situation.

On the surface of the celestial globe, the images of the several constellations and the unformed stars are delineated; and the relative magnitude and position, which the stars are observed to have in the heavens, are carefully preserved.

In order to render these globes more useful, they are fitted up with certain appurtenances, whereby a great variety of useful problems are solved in a very easy and expeditious manner.

The *brazen meridian* is that ring in which the globe hangs on its axis, represented by two wires passing through its poles. The circle is divided into four quarters of 90 degrees each; in one semicircle the divisions begin at each pole, and end at 90 degrees on the equator, where they meet. In the other semicircle, the divisions begin at the equator, and proceed thence toward each pole, where they end at 90 degrees. The graduated side of this brazen circle serves as a meridian for any point on the surface of the earth, the globe being turned about till that point come under it.

The *hour circle* is a small circle of brass, divided into 24 hours, the quarters and half quarters. It is fixed on the brazen meridian, with its centre over the north pole; to the axis is fixed an index, that points out the divisions of the hour circles as the globe is turned round its axis. Sometimes the hour circle, with its divisions, is described or marked about the north pole on the surface of the globe, and is made to pass under the index. In some of Adams's globes, the equator is used as an hour circle, over which is placed a semicircular wire, carrying two indices, one on the east side of the brazen meridian, and the other on the west.

The *horizon* is represented by the upper surface of the wooden circular frame encompassing the globe about its middle. On this wooden frame there is a kind of perpetual calendar, contained in several concentric circles. The inner one is divided into four quarters of 90 degrees each; the next circle is divided into the 12 months, with the days in each according to the new style; the next contains the 12 equal signs of the zodiac or ecliptic, each being divided into 30 degrees; the next the 12 months and days according to the old style; and there is another circle, containing the 32 points of the compass, with their halves and quarters. Although these circles are on most horizons, yet they are not always placed in the same order.

The *quadrant of altitude* is a thin slip of brass, one edge of which is graduated into ninety degrees and their quarters, equal to those of the meridian. To one end of this is fixed a brass nut and screw, by which it is put on and fastened to the meridian; if it be fixed in the zenith, or pole of the horizon, then the graduated edge represents a vertical circle passing through any point of the horizon, to which it is directed.

Beside these, there are several circles, described on the surfaces of both globes; as the *equator, ecliptic, circles of longitude and right ascension, the tropics, polar circles, parallels of latitude and declination*, on the celestial globe; and on the terrestrial, the *equator, ecliptic, tropics, polar circles, parallels of latitude, hour circles or meridians*, to every 15 degrees; and on some globes, the *spiral rhumbs* flowing from several centres, called *flies*.

In using the globes keep the graduated side of the meridian towards you, unless the problems require a different position. With respect to the terrestrial, we are to suppose ourselves situated at a point on its surface; with respect to the celestial, at its centre. The motion of the former represents the real diurnal motion of the earth; that of the latter the apparent diurnal motion of the heavens.

The following PROBLEMS are the most useful and entertaining, are selected from a great variety of others, which are easily solved with a *terrestrial globe* fitted up with the aforesaid appurtenances.

I. *The latitude of a place being given, to rectify the globe for that place.*

Let it be required to rectify the globe for the latitude of Boston, 42 degrees 23 minutes north.

Elevate the north pole, till the horizon cut the brazen meridian in 42 23, and the globe is then rectified for the latitude of Boston. Bring Boston to the meridian, and you will find it in the zenith, or directly on the top of the globe. And so of any other place.

II. *To find the latitude and longitude of a place on the globe.*

Bring the given place under that half of the graduated brazen meridian, where the degrees begin at the equator, and under the graduated side of it; then the degree of the meridian over it shows the latitude; and the degree of the equator, under the meridian, shows the longitude.

Thus Boston will be found to lie in about 42 23 north latitude, and 71 west longitude from Greenwich.

III. *To find the sun's place in the ecliptic.*

Look the day of the month on the horizon, and opposite to it, you will find the sign and degree the sun is in that day. Thus on

the 25th of March, the sun's place is $4\frac{1}{2}$ degrees in *Aries*. Then look for that sign and degree in the *ecliptic line* marked on the globe, and you will find the sun's place; there fix on a small black patch, so is it prepared for the solution of the following problems.

Note. The earth's place is always in the sign and degree opposite to the sun; thus, when the sun is $4\frac{1}{2}$ degrees in *Aries*, the earth is $4\frac{1}{2}$ degrees in *Libra*; and so of any other.

IV. *To find the sun's declination, that is, its distance from the equinoctial line, either northward or southward.*

Bring its place to the meridian; observe what degree of the meridian lies over it, and that is the declination. If the sun lie on the north side of the line, the declination is *north*, but if on the south side the declination is *south*.

Thus on the 20th of April the sun has $11\frac{1}{2}$ degrees of north declination, but on the 26th of October, it has $12\frac{1}{2}$ of south declination.

Note. The greatest declination can never be more, either north or south, than the distance of a tropic from the equator.

V. *To find where the sun is vertical on any day.*

Bring the sun's place to the meridian, observe its declination, or hold a pen or wire over it; then turn the globe round, and all those countries which pass under the wire, will have the sun vertical, or nearly so, that day at noon. Thus on the 16th day of April, the inhabitants of the north part of *Terra Firma*, *Porto-Bello*, *Philippine Isles*, southern parts of *India*, *Abyssinia*, *Ethiopia*, and *Guinea*, have the sun over their heads that day at 12 o'clock.

Note. This appearance can only happen to those who live in the torrid zone.

VI. *To find at any hour of the day, what o'clock it is at any place.*

Bring the place where you are, to the brass meridian: set the index to the hour, turn the globe till the place you are looking for come under the meridian, and the index will point out the time required.

Thus when it is 10 o'clock in the morning, at Boston, it is 24 minutes past 12 at Olinda in Brazil, and 3 at Mexico in New-Spain: the former being at 35 degrees west longitude, and the latter at 100 degrees west longitude.

Note. By this problem you may likewise see at one view, in distant countries, where the inhabitants are rising, where breakfasting, dining, drinking tea, where going to assemblies, and where to bed.

VII. *To find at what hour the sun rises and sets any day in the year at a place, the latitude of which does not exceed $66\frac{1}{2}$ degrees; and also on what point of the compass it rises and sets.*

Rectify the globe for the latitude of the place; bring the sun's place to the meridian, and set the index to 12; then turn the sun's place to the eastern edge of the horizon, and the index will point out the hour of rising; if you bring it to the western edge of the horizon, the index will shew the hour of setting.

Thus on the 10th day of April, the sun rises at half an hour after five o'clock at Boston, and sets half an hour before seven.

Note. In summer the sun rises and sets a little to the northward of the east and west points; and in winter a little to the southward of them. If, therefore, when the sun's place is brought to the eastern and western edges of the horizon, you look on the horizon directly against the little patch, you will see the point of the compass on which the sun rises and sets that day.

VIII. *To find the length of the longest and shortest day at a given place.*

Rectify the globe for that place; if its latitude be north, bring the beginning of Cancer to the meridian; set the index to 12, then bring the same degree of Cancer to the east part of the horizon, and the index will show the time of the sun's rising, which doubled, gives the length of the shortest night.

If the same degree be brought to the western side, the index will show the time of the sun's setting, which doubled will give the length of the longest day.

If we bring the beginning of Capricorn to the meridian, and proceed in all respects as before, we shall have the length of the longest night and shortest day.

Thus in Egypt and Florida the longest day is 14 hours, and the shortest night 10 hours. The shortest day is 10 hours, and the longest night 14 hours.

At Petersburg, the capital of Russia, the longest day is about $19\frac{1}{2}$ hours, and the shortest night $4\frac{1}{2}$ hours. The shortest day $4\frac{1}{2}$ hours, and the longest night $19\frac{1}{2}$ hours.

Note. In all places near the equator, the sun rises and sets at 6 o'clock, through the year. Thence to the polar circles, the days increase as the latitude increases; so that at those circles the longest day is 24 hours, and the longest night the same. From the polar circles, to the poles, the days continue to lengthen into weeks and months; so that at the pole, the sun shines for six months together in summer, and is below the horizon six months in winter. *Note* also, that when it is summer with the northern inhabitants, it is winter with the southern, and the contrary; and every part of the world partakes of an equal share of light and darkness.

IX. *To measure the distance from one place to another.*

Only take their distance with a pair of dividers, and apply it to the equinoctial, that will give the number of degrees between them, which, being multiplied by 60, (the number of geographical miles in one degree) gives the exact distance sought: or, extend the quadrant of altitude from one place to another, that will show the number of degrees in like manner, which may be reduced to miles as before.

Thus the distance from London to Madrid is $11\frac{1}{2}$ degrees. From Paris to Constantinople $19\frac{1}{2}$ degrees. From Bristol in England to Boston 45 degrees, which, multiplied by $69\frac{1}{2}$ (the number of English miles in a degree) gives 3127 $\frac{1}{2}$ miles.

Note. No place can be further from another than 180 degrees, that being half the circumference of the globe, and consequently the greatest distance.

PROBLEMS SOLVED ON THE CELESTIAL GLOBE.

The equator, ecliptic, tropics, polar circles, horizon and brazen meridian are exactly alike on both globes. Both also are rectified in the same manner.

N. B. The sun's place for any day of the year stands directly against that day on the horizon of the celestial globe, as it does on that of the terrestrial.

The *latitude* and *longitude* of the celestial bodies are reckoned in a very different manner from the latitude and longitude of places on the earth; for all terrestrial latitudes are reckoned from the equator, and longitudes from the meridian of some remarkable place, as of London by the British, and of Paris by the French. But the astronomers of all nations agree in reckoning the latitudes of the moon, planets, comets and fixed stars, from the ecliptic; and their longitudes, and that of the sun from the equinoctial colure, and from that semicircle of it, which cuts the ecliptic at the beginning of Aries; and thence eastward, quite round to the same semicircle again. Consequently those stars, which lie between the equinoctial and the northern half of the ecliptic, have north declination, but south latitude; those which lie between the equinoctial and the southern half of the ecliptic have south declination, but north latitude; and all those which lie between the tropics and poles have their declination and latitudes of the same denomination.

PROB. I. *To find the right ascension and declination of the sun, or any fixed star.*

Bring the sun's place in the ecliptic to the brazen meridian; then that degree in the equinoctial which is cut by the meridian is the sun's *right ascension*; and that degree of the meridian which is over the sun's place is its *declination*. Bring any fixed star to the meridian, and its right ascension will be cut by the meridian in the

equinoctial; and the degree of the meridian that stands over it is its declination. So that right ascension and declination on the celestial globe are found in the same manner as longitude and latitude on the terrestrial.

II. *To find the latitude and longitude of a star.*

If the given star be on the north side of the ecliptic, place the 90th degree of the quadrant of altitude on the north pole of the ecliptic, where the twelve semicircles meet, which divide the ecliptic into the twelve signs; but if the star be on the south side of the ecliptic, place the 90th degree of the quadrant on the south pole of the ecliptic: keeping the 90th degree of the quadrant on the proper pole, turn the quadrant about, until its graduated edge cut the star; then the number of degrees on the quadrant, between the ecliptic and the star, is its latitude; and the degrees of the ecliptic cut by the quadrant is the star's longitude, reckoned according to the sign in which the quadrant then is.

METHODS OF FINDING THE LATITUDES AND LONGITUDES OF PLACES FROM CELESTIAL OBSERVATIONS.

What is meant by latitude and longitude has already been sufficiently explained; it remains that we show the methods of finding both by celestial observations.

Of finding the latitude. There are two methods of finding the latitude of any place. The first is by observing the height of the pole above the horizon; the second by discovering the distance of the zenith of the place from the equator. The elevation of the pole is always equal to the latitude; and is thus found. As there is no star, towards which either pole points directly, fix upon some star near the pole. Take its greatest and least height when it is on the meridian. The half of these two sums (proper allowance being made for the refraction of the atmosphere) will be the latitude. The other method is this. The distance of the zenith of any place from the celestial equator, measured in degrees on the meridian, is equal to the latitude. Fix upon some star lying in or near the equator. Observe its zenith distance when it is in the meridian. If it is directly in the equator this will be the latitude. If it is nearer than the equator add its declination to its zenith distance; if farther, deduct its declination from its zenith distance; the sum or difference will be the latitude.

Of finding the longitude. There are three approved methods of discovering the longitude; 1st, By the moon's distance from the sun or a fixed star; 2d, By a time-keeper; 3d, By an eclipse of the moon, or of one of Jupiter's satellites. The last only will be described in this place. By the earth's rotation on its axis in 24 hours, the sun appears to describe, in the same space of time, an apparent circle of 360 degrees in the heavens. The apparent motion of the sun is therefore 15 degrees in an hour. If two places

therefore differ 15 degrees in longitude, the sun will pass the meridian of the eastern place 1 hour sooner than the western. The commencement of a lunar eclipse is seen, at the same moment of time, from all places where the eclipse is visible. If then an eclipse of the moon is seen to commence, at one place, at 12 o'clock at night, and at another place, at 1 o'clock; the places differ 15 degrees in longitude, and the last lies eastward of the first. The nautical almanac, published in London, and calculated for the meridian of Greenwich, contains the exact time when the eclipses of the moon commence at that place. When the time of the commencement of an eclipse at any place has been observed, a comparison of it with the time in the almanac will determine the difference of time between the place and Greenwich. If the hour is later than the hour in the almanac, the place is situated to the east of Greenwich; if earlier, to the west. As 1 hour in time is 15 degrees in motion, so is one minute, 15 minutes, and one second, 15 seconds. This would be the easiest and most accurate method of ascertaining the longitude, if we could determine the precise moment of time when a lunar eclipse commences. But this cannot, in general, be determined nearer than 1 minute, and often not nearer than 2 or 3 minutes. A variance of 1 minute would make the difference of 15 minutes or miles in longitude; of 2 minutes, 30 minutes; and of 3 minutes, 45 minutes.

This objection does not lie against the method of ascertaining the longitude by the eclipses of Jupiter's satellites. The telescope enables us to determine the precise moment when they are immersed in the shadow of their primary. The hour at the place, therefore, being ascertained, and compared with the hour in the almanac, we are enabled to determine, as before, the exact difference of longitude.

On the equator a degree of longitude is equal to 60 geographical miles; and of course a minute on the equator is equal to 1 geographical mile. But as all the meridians cut the equator at right angles and approach nearer and nearer till they cross each other at the poles, it is obvious that the degrees of longitude decrease as you go from the equator to the pole.

A TABLE

Showing the number of geographical miles contained in a degree of longitude in each parallel of latitude from the equator.

Degrees of Latitude.	Miles.	100th parts of a mile.	Degrees of Latitude.	Miles.	100th parts of a mile.	Degrees of Latitude.	Miles.	100th parts of a mile.	Degrees of Latitude.	Miles.	100th parts of a mile.
0	60	0	23	55	23	46	41	68	69	21	50
1	59	99	24	54	31	47	40	92			
2	59	96				48	40	14	70	20	52
3	59	91	25	54	38	49	39	26	71	19	53
4	59	85	26	53	93				72	18	54
			27	53	46	50	38	57	73	17	54
5	59	77	28	52	97	51	37	76	74	16	53
6	59	67	29	52	47	52	36	94			
7	59	55				53	36	11	75	15	53
8	59	41	30	51	96	54	35	27	76	14	51
9	59	26	31	51	43				77	13	50
			32	50	88	55	34	41	78	12	47
10	59	09	33	50	32	56	33	55	79	11	45
11	58	89	34	49	74	57	32	68			
12	58	68				58	31	79	80	10	42
13	58	46	35	49	15	59	30	90	81	9	38
14	58	22	36	48	54				82	8	34
			37	47	92	60	30	00	83	7	31
15	57	95	38	47	28	61	29	09	84	6	27
16	57	67	39	46	62	62	28	17			
17	57	38				63	27	24	85	5	22
18	57	06	40	45	96	64	26	30	86	4	18
19	56	73	41	45	28				87	3	14
			42	44	58	65	25	35	88	2	09
20	56	39	43	43	88	66	24	40	89	1	05
21	56	01	44	42	16	67	23	44	90	0	00
22	55	63				68	22	47			
			45	42	42						

MAPS, AND THEIR USE.

A map is the representation of some part of the earth's surface, delineated on a plane, according to the laws of projection; for as the earth is of a globular form no part of its spherical surface can be accurately exhibited on a plane.

Maps differ from the globe in the same manner as a picture does from a statue. The globe truly represents the earth; but a map not more than a plane surface represents one that is spherical. But although the earth can never be exhibited exactly by one map, yet by means of several of them, each containing about 10 or

20 degrees of latitude, the representation will not fall very much short of the globe in exactness; because such maps, if joined together, would form a convex surface nearly as round as the globe itself.

Cardinal Points. The upper part of the map is considered as the north; the bottom is south, being opposite to the north; the east is on the right hand, the face being turned to the north; and the west on the left hand, opposite to the east. From the top to the bottom are drawn meridians, or *lines of longitude*; and from side to side, *parallels of latitude*. The meridians and parallels are marked with degrees of latitude or longitude, by means of which, and the *scale of miles*, which is commonly placed in a corner of the map, the situations, distances, &c. of places may be found as on the artificial globe. Thus to find the distance of two places, suppose Philadelphia and Boston, by the map, we have only to measure the space between them with the compasses, or a piece of thread, and to apply this distance to the scale of miles, which shows that Boston is 236 miles distant in a straight line from Philadelphia. If the places lie directly north or south, east or west, from one another, we have only to observe the degrees on the meridians and parallels, and by reducing these to miles, we obtain the distance without measuring. Rivers are described in maps by black lines, and are wider toward the mouth than toward the head or spring. Mountains are sketched on maps as on a picture. Forests and woods are represented by a kind of shrub; bogs and morasses, by shades; sands and shallows are described by small dots; and roads usually by double lines. Near harbors, the depth of the water is expressed by figures, representing fathoms.

WINDS.

Air is a fine, invisible fluid, surrounding the earth, and extending some miles above its surface; and that collection of it, together with the bodies it contains, circumscribing the earth, is called the *atmosphere*.

Few natural bodies have been the subject of more experiments than the air; and from these it appears, that it is both heavy and elastic. By its gravity it is capable of supporting all lighter bodies, as, smoke, vapors, odors, &c. And by its elasticity, a small volume of air is capable of expanding itself in such a manner as to fill a very large space, and also of being compressed into a much smaller compass. Cold has the property of compressing air, and heat of expanding it. But as soon as the cause of expansion or compression is removed, it will return to its natural state. Hence, if an alteration be made in any part of the atmosphere, either by heat or cold, the neighboring parts will be put in commotion by the effort which the air always makes to recover its former state.

Wind is nothing more than a stream or current of air, capable of very different degrees of velocity, and generally blowing from one point of the horizon to its opposite. The horizon, like all

other circles, is divided into 360 degrees; but as these divisions are too minute for common use, it is also divided into 32 equal parts, called *rhumbs* or *points of the compass*. Winds are denominated east, west, north, south, &c. according to the points of the compass from which they blow; and with respect to their direction, are distributed into three classes, viz. general, periodical, and variable.

General winds are such as blow always nearly in the same direction. They are found to prevail in the Atlantic and Pacific oceans between the latitudes of about 28 degrees north and south; blowing generally at the equator from the east, on the north side of it between the north and east, and more northerly the nearer the northern limit; and on the south side, between the south and east, and more southerly the nearer the southern limit, and are also called *tropical* or *general trade winds*.

Periodical winds are such as blow nearly in certain directions during certain periods of time. The *monsoons* or *shifting trade winds*, and the *land and sea breezes*, are of this kind. The monsoons blow six months in one direction, and then six months in the opposite, the changes happening about the times of the equinoxes. These winds chiefly prevail in some parts of the Indian Ocean. The *land and sea breezes* are winds, which blow from the land in the night, and from the sea in the day time, changing their direction every 12 hours. They obtain in some degree on the coast of every country, but are most remarkable between the tropics. At the islands between the tropics, the sea breeze begins about nine o'clock in the morning and continues till about nine in the evening; a land breeze then succeeds and continues till about nine the next morning.

The periodical winds arise from the difference in the temperature of the air over land, and of that over water, occasioned by their not acquiring or losing equal degrees of heat in a given time. The Indian ocean is bounded on the east and north by part of Africa, Arabia, Persia, and India, the shores of which are situated within the limits of the trade winds; and the sun, after the vernal equinox, renders the air above these extensive tracts of land hotter than that above the adjacent sea, and thus produces a wind, which soon begins to blow toward the land. This direction of the wind continues from April to October, when the sun having passed to the south side of the equator, the air over the land toward the north becomes colder than that over the water, the direction of the wind is inverted, and it blows on the opposite point the remaining six months of the year. And with respect to the land and sea breezes, the effect of the sun in heating the air over the land in the day time being greater than the heat it produces in the air over the adjacent seas, sea breezes arise; and in the night, the air, which before was hottest, becomes and continues coldest, and a land breeze is the consequence.

Variable winds are those, which are subject to no regularity of duration or change. All the winds in latitudes higher than 40° are of this kind.

Variable, as well as periodical, winds are principally owing, without doubt, to the different temperatures of air incumbent on land and water.

Between the fourth and tenth degrees of north latitude, and between the longitudes of Cape Verd and the easternmost of the Cape de Verd Islands, is a tract of sea, which seems to be condemned to perpetual calms, attended with dreadful thunder and lightning, and such frequent rains, that it has acquired the name of the *Rains*. This phenomenon seems to be caused by the great rarefaction of the air on the neighboring coast, which causes a perpetual current of air to set in from the westward, and this current meeting here with the general trade wind, the two currents balance each other, and cause a general calm; while the vapors carried thither by each wind, meeting and condensing, occasion these frequent deluges of rain.

Dr. Derham, from repeated observations upon the motion of light, downy feathers, found that the greatest velocity of the wind was not above 60 miles in an hour. But Mr. Bruce justly observes, that such experiments must be subject to great inaccuracy, as the feathers cannot proceed in a straight line; he therefore estimates the velocity of winds by means of the shadow of a cloud over the earth, by which he found, that, in a great storm, the wind moves 63 miles an hour; in a fresh gale, 21 miles an hour; and in a small breeze, 10 miles an hour. Mr. Rouse makes the velocity of a hurricane 100 miles an hour.

TIDES.

By the term *tide* is meant the regular alternate rising and falling of the water in the sea and rivers. The phenomena of the tides occasioned a variety of opinions among the ancient philosophers, and the cause was considered as one of the greatest mysteries in nature. It remained in obscurity till the latter end of the 16th century, when Sir Isaac Newton clearly pointed it out, and showed the agreement of its effects with the observed phenomena.

A heavy body, being thrown up in the air, falls again to the earth in a direction perpendicular to its surface, or in a line tending to its centre. The cause of the body's falling is a species of attraction, called *gravity* or *gravitation*. This principle operates not only between the earth and all bodies near its surface, but also between all the bodies which compose the solar system, and probably between all the bodies and systems of the universe. And it is abundantly proved by experiment and observation, that the force of gravity is inversely as the squares of the distances of the bodies from one another, that is, the force decreases in the same ratio as the squares of the distances increase, and *vice versa*.

The flowing and ebbing of the sea are to be attributed to the attraction of the sun and moon; but principally to that of the moon on account of its less distance from the earth.

The attractive force of the moon varies at different distances,

being greater at a small distance and smaller at a great distance. Its power is found to diminish as the squares of the distances increase. Thus, if at the distance of 10,000 miles, the attractive force be considered as 4, at the distance of 20,000 it will be only 1. Hence the waters on the side of the earth directly under the moon are more attracted by the moon than the central parts of the earth, because they are nearer to the moon, and the central parts of the earth are more attracted than the waters on the opposite side of the earth. Consequently the waters directly under the moon will be as it were attracted from the centre of the earth and be made to rise towards the moon; and the centre of the earth will be as it were attracted from the waters on the side of the earth opposite to the moon, so that those waters will be less near the earth's centre than if the moon did not operate, i. e. they will rise. On the meridian directly under the moon, therefore, there will be a high tide and a similar one on the opposite side of the earth, at the distance of 180° . On each side, however, at 90° distance from that meridian, in consequence of the moon's very oblique attraction, the waters will be depressed.

The tides are higher than ordinary twice a month, viz. about the times of the new and full moon; and these are called *spring tides*. Because at these times the attraction of the sun conspires with that of the moon, or their agency is in the same right line; and consequently the tides must be more elevated. When the two luminaries are in conjunction, or on the same side of the earth, they both conspire to raise the water on the nearest and remotest part; and when they are in opposition, that is, when the earth is between them, the part nearest to the one is remotest from the other, and *vice versa*, consequently the effects of their agency are united.

The tides are less than ordinary twice a month; that is, about the times of the first and last quarters of the moon; and these are called *neap tides*. For in the quarters of the moon, the sun raises the water where the moon depresses it; and depresses it where the moon raises it; the tides are made therefore by the difference of their actions.

LENGTH OF MILES IN DIFFERENT COUNTRIES.

There is scarcely a greater variety in any thing than in this sort of measure; not only those of separate countries differ, as the French from the English, but those of the same country vary in the different provinces, and all commonly from the standard. Thus the common English mile differs from the statute mile, and the French have three sorts of leagues.

We shall here give the miles of several countries, compared with the English, by Dr. Hally.

The English statute mile consists of 5280 feet, 1760 yards, or 8 furlongs.

Eleven Irish miles are equal to fourteen English.

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INTRODUCTION.

The Russian verst or werst is little more than $\frac{2}{3}$ English.

The Turkish, Italian, and old Roman less, mile is nearly 1 English.

The Arabian, ancient and modern, is about $1\frac{1}{2}$ English.

The Scotch mile is about $1\frac{1}{2}$ English.

The Indian is almost 3 English.

The Dutch, Spanish, and Polish, is about $3\frac{1}{2}$ English.

The German is more than 4 English.

The Swedish, Danish, and Hungarian is from 5 to 6 English.

The French common marine league is nearly 3, and

The English marine league is 3 nautical miles.

SCRIPTURE MEASURES OF LENGTH.

							Eng. Yds. Ft. Inches.
Digit							0 0 0·912
4	Palm						0 0 3·648
12	3	Span					0 0 10·944
24	6	2	Cubit				0 1 9·888
69	24	8	4	Fathom			2 1 3·552
144	36	12	6	$1\frac{1}{2}$	Ezekiel's Rod		3 1 11·328
192	48	16	8	2	$1\frac{1}{3}$	Arabian Pole	4 2 7·104
1920	480	160	80	20	$13\frac{1}{2}$	Schænus, or Measuring Line	48 1 11·04

THE LONGER SCRIPTURE MEASURES.

					Eng. Miles.	Yds.	Eet.
Cubit					0	0	1·824
400	Stadium				0	243	0·6
2000	5	Sabbath Day's Journey			0	1216	0·
4000	10	2	Eastern Mile		1	672	0·
12000	30	6	3	Parasang	4	256	0·
96000	240	48	24	8	A Day's Journey	33	288 0·

The East used another span equal to one third of a cubit.

The above are sacred measures, in the lengths of which there must necessarily be some degree of uncertainty. Arbuthnot makes

the sacred cubit equal to 1.7325 feet. He also observes, that the Jews sometimes made use of a profane cubit, the length of which he determined to be 1.485 feet.

DIFFERENT TIMES WHEN THE DAY BEGINS; AND A SHORT ACCOUNT OF
THE OLD AND NEW STYLE.

The ancient Egyptians and Romans supposed the day to begin at midnight; and it is also now considered by the United States of America, Great-Britain, France, and most European countries, as beginning at that time. In Astronomy, however, it is supposed to begin at noon, or the time when the sun is on the meridian. The beginning has been fixed at sunrise by some nations, as the ancient Babylonians, Persians, &c. and at sunset by others, as the ancient Jews, Grecians, &c.

In the *Julian calendar* or *old style*, a method of reckoning time, adopted by Julius Caesar, about 45 years before the birth of Christ, which was much preferable to any that preceded it, a year was supposed to consist 365 days and 6 hours; each of 3 years in succession was considered as a common year of 365 days, and on account of the annual excess of 6 hours, another was added to every fourth, which consequently consisted of 366 days, and was called *leap year*. As the solar year, or the time of the apparent annual revolution of the sun, is not exactly 365 days and 6 hours, but nearly 365 days, 5 hours, 48 minutes and 48 seconds, it follows, that the Julian year exceeded the solar by about 11 minutes and 12 seconds. This annual excess amounts to 1 day in 129 years. Notwithstanding this inaccuracy, the Julian style was generally used in Europe till the year 1582, when it was reformed by Pope Gregory the thirteenth, who introduced what is called the *Gregorian* or *new style*.

It having been found that the vernal equinox, which had been fixed to the 21st of March by the council of Nice, held in the year 325, happened the 11th of March in 1582, the difference of 10 days between the civil and real time was taken from the October of that year, and the 21st of the next March reduced to the true time of the equinox. But the Protestant states refused; at that time, to accede to the new style, which the Pope had enjoined on all the ecclesiastics within his jurisdiction, and exhorted the Christian princes to adopt in their respective dominions; and it did not commence in the British empire, of which the present United States of America then made a part, till the year 1752, when the error having increased to 11 days, they were, by an act of parliament, struck out of the calendar from the month of September, the third day, according to the old style, being called the fourteenth.

The reformation of the calendar consisted not only in expunging the excess of the civil above the real time, but also in the introduction of a principle which should prevent a like accumulation of error in future. According to the old style the last year

of every century is a leap year, but in the new only every fourth of these leap years is retained, the rest being considered as common years. This diminution of the number of leap years nearly balances the error, which, at the rate of 11 minutes and 12 seconds a year, amounts to 1 day in 129 years, and 3 days in about 4 centuries.

It is, however, to be observed, that at the above annual rate of 11 minutes and 12 seconds, the accumulation in 4 centuries is 3 days, 2 hours, and 40 minutes, so that the deduction of 3 days in 4 centuries, falls short of the difference between the civil and real time by 2 hours and 40 minutes, which error will become equal to 1 day in 36 centuries.

UNIVERSAL GEOGRAPHY.

THE EARTH.

Extent.] The surface of the globe is estimated to contain 197,000,000 square miles, of which more than 50,000,000, or one quarter of the whole, is land.

Natural Divisions.] The great natural division of the earth's surface is into *Land* and *Water*.

1. The land consists of continents, islands, peninsulas, isthmuses, capes, mountains, hills, and valleys.

A *Continent* is a great extent of land, no where entirely separated by water.—There are two continents; the *Eastern* and the *Western*. The Eastern continent is subdivided into *Europe*, *Asia*, and *Africa*; the Western, into *North America* and *South America*.

An *island* is a portion of land smaller than a continent, entirely surrounded by water; as *Great Britain*, *Newfoundland*, *Cuba*, *Madagascar*.

A *peninsula* is a portion of land almost surrounded by water, as *Spain*, *Florida*.

An *isthmus* is the narrow neck of land which joins a peninsula to the main land; as the isthmus of *Darien*, the isthmus of *Suez*.

A *cape* is a point of land projecting into the sea; as *Cape Cod*, *Cape Horn*.

A *mountain* is a portion of land elevated to a great height above the surrounding country. When the land rises to a small height it is called a *hill*. The spaces between hills are called *dales* or *valleys*. A *volcano* is a burning mountain which emits smoke and flame.

2. The water is composed of oceans, lakes, seas, sounds, bays or gulfs, harbors, roads, straits, rivers and friths or estuaries.

The largest collections of water on the globe are called *oceans*. There are five oceans; the *Indian* ocean, lying between *Africa*, *Asia*, and *New-Holland*; the *Atlantic*, between *America* on one side and *Europe* and *Africa* on the other; the *Pacific*, between *America* on one side, and *Asia* and *New-Holland* on the other; the *Northern* or *Arctic*, around the north pole; the *Southern*, around the south pole.

A *lake* is a collection of water in the interior of a country, as *Lake Superior*, *Lake Erie*.

A *sea* is a large collection of water communicating with an ocean, as the *Mediterranean* sea, the *Baltic*.

A *sound* is a small sea so shallow that it may be sounded ; as *Long Island Sound*.

A *gulf* or *bay* is a part of an ocean, sea, or lake, extending up into the land. The terms sea, gulf, and bay are very vaguely used. Sometimes the same body of water is called a sea, and also a gulf, or bay ; as the *Red Sea* or *Arabian Gulf*, the *Adriatic Sea*, or *Gulf of Venice*. Sometimes a lake is called a sea, as the *Caspian sea* and *sea of Aral*, both of which answer to the definition of lake.

A *harbor* or *haven* is a part of the sea, almost surrounded by land, where vessels may anchor with safety.

A *road* is a place at some distance from the shore where ships may safely ride at anchor.

A *strait*, is a narrow channel connecting two large bodies of water ; as the strait of *Gibraltar*.

A *river* is a large stream of inland water ; small streams are called *brooks*.

A *frith* or *estuary* is the part of a river towards its mouth which is affected by the tide. It may be considered as an arm of the sea.

Grand Divisions.] Geographers have commonly considered the world under four grand divisions, *America*, *Europe*, *Asia*, and *Africa*. Besides these, there are two clusters of islands, which form separate divisions, *Australasia* and *Polynesia*.

America is remarkable for the size and grandeur of its mountains, lakes, and rivers. Large parts of America are inhabited only by savages and wild beasts, and have never yet been visited by white men.

Europe is the smallest of the four grand divisions, but is distinguished above all the rest for learning and science, for excellence in the useful and elegant arts, and for the intelligence, refinement, activity and enterprise of her inhabitants. Owing to her superior knowledge and military skill, this little portion of the globe holds the greater part of America, and large portions of Asia, Africa and their islands in colonial bondage.

Asia is remarkable, as the part of the world where the human race were first planted, and as the theatre of almost all the interesting events recorded in the Bible. Here was the garden of Eden ; here lived Adam and Noah, Abraham and all the prophets ; here our Saviour was born and was crucified ; here was Jerusalem, and Babylon and Nineveh. Here were established the Assyrian, the Babylonian and the Persian empires.

Africa is the most barbarous portion of the world. It is remarkable for its vast deserts of burning sands, for the multitude of its ferocious animals, and for the black color of its inhabitants.

Political Divisions.] An *empire* consists of several large countries, under the dominion of one man, usually called an emperor.

A *kingdom* consists of a single country, subject to a monarch, called a king.

A *dutchy*, a *grand dutchy*, and a *principality*, are smaller portions of country subject severally to a duke, a grand duke, and a prince, who are themselves subject to the sovereign power.

Provinces, countries, departments, cities, towns, parishes, hundreds, &c. are still smaller subdivisions of countries.

Governments.] There are but three simple forms of government, *monarchy, aristocracy and democracy.*

1. A *simple monarchy* is a government in which the sovereign power is exercised by one man.

If the power of the monarch is limited by law it is called a *limited monarchy*; if not, it is an *absolute monarchy*. In absolute monarchies there is usually some check upon the power of the sovereign, in the institutions or customs of the country; but if not, the government is a *despotism*.

2. An *aristocracy* is a government administered by a few men, usually styled the nobility.

3. A *democracy* is a government exercised by the great body of the people.

When two or all of the simple forms are united, it is denominated a *mixed government*. Thus the British government partakes of the monarchical, aristocratical, and democratical forms.

Population.] The number of people in the world is variously estimated, from 500,000,000 to 1,000,000,000. Hassel makes it 682,000,000. The following is his statement of the extent and population of each of the grand divisions of the globe.

	<i>Sq. Miles.</i>	<i>Population.</i>	<i>No. of inhabitants to a square mile.</i>
Europe	3,337,109	180,000,000	53
Asia	16,728,002	380,000,000	32
Africa	11,652,442	99,000,000	8
America	16,504,254	21,000,000	1
Australasia, &c.	4,164,420	2,000,000	$\frac{1}{2}$
Earth	52,436,137	682,000,000	13

The third column shows the density of the population, or the number of inhabitants on each square mile of the territory.

Religions.] The principal religions of the world are the *Christian*, the *Mahometan*, the *Jewish*, and the *Pagan*, or *Heathen*.

Christianity is the religion of Europe, and of European settlements in every part of the world.

Mahometanism prevails in the northern part of Africa, and the southern and western parts of Asia.

The *Jews* are dispersed all over the world.

The *Pagans* or *Heathen* are more numerous than all the rest, and include all savages in every part of the world, together with the inhabitants of the half-civilized countries in the southeast part of Asia.

The numbers attached to the different religions may be estimated as follows.—

Pagans,	400,000,000
Christians	212,000,000
Mahometans	65,000,000
Jews.	5,000,000
	<hr/>
	682,000,000

Christians are subdivided into three principal sects.

1. *Roman Catholics*, who have a Pope at their head, and are thence often called *Papists*. The Roman Catholics inhabit the southern parts of Europe, and the Spanish, French and Portuguese settlements in different parts of the world.

2. *Protestants* are those who have separated from the church of Rome, and no longer acknowledge the authority of the Pope. They inhabit the northwest parts of Europe, the United States of America, and the English and Dutch settlements in different parts of the world.

Protestants are subdivided into a great many smaller sects, the principal of which are Episcopalians, Presbyterians, Congregationalists, Baptists, Methodists, Moravians, Friends or Quakers, &c.

3. The *Greek church* is established in Russia in Europe, and part of Turkey. The members of this church never acknowledged the authority of the Pope.

AMERICA.

Situation and Extent.] America is bounded on the east by the Atlantic, which separates it from Europe and Africa; and on the west, by the Pacific, which separates it from Asia. Towards the north, its limits have not been discovered. Towards the south, it terminates in a point, called Cape Horn. It is more than 9,000 miles long, and, on an average, about 1500 broad.

History of its Discovery.] America was unknown to the civilized world till about 300 years ago. It was discovered in 1492, by Christopher Columbus, a native of Genoa. From long study of Geography, Columbus became deeply impressed with the belief, that there was a new continent in the west. To determine this point, he resolved upon a voyage; and applied to the governments of Genoa, Spain, Portugal and others, for the necessary assistance; but his applications were rejected.

At length Ferdinand and Isabella, the sovereigns of Castile and Arragon, listened to his proposals; a squadron of three small vessels was fitted out, victualled for twelve months, furnished with 90 men, and Columbus appointed admiral.

He left Spain in August, and steered his course for the Canary islands; and thence, sailed due west, for more than 2000 miles, into an unknown ocean, without seeing land. His men now became impatient, and began to mutiny, and Columbus was forced to promise that he would return, if land was not discovered in three days.

Favorable indications soon appeared. On the 11th of October, a little before midnight, Columbus from the fore-castle descried a light; and shortly after, the cry of *land! land!* resounded from the *Pinta*, the headmost ship. The morning light confirmed the report. One of the West-India islands was directly before them. The crews of all the ships with shouts of joy then gave praise to God; and throwing themselves at the feet of Columbus, implored his forgiveness for their incredulity and disobedience.

On the return of Columbus to Spain, the news of his success soon spread abroad; others were inspired with the same spirit of enterprise; expeditions were fitted out from various parts of Europe; and in a few years, the whole continent was discovered from Labrador to Cape Horn.

Inhabitants.] The number of inhabitants in America is commonly estimated at 35,000,000. They may be divided into three classes, according to their color. 1. *Whites*. They are the descendants of Europeans, who have migrated to America, at various periods since its discovery. 2. *Negroes*. They are the descendants of Africans, who were forced from their native country, and sold as slaves to the American planters. 3. *Indians*; of a copper complexion; they are the descendants of the Aborigines, or those who occupied the country at the time of its discovery. Besides these, there is a small class of *mulattoes*, *mestizoes*, and others, formed by the mixture of the 3 original classes.

The whites constitute more than half the population; the negroes, one eighth part; and the Indians, about one third. The whites and negroes are rapidly increasing; the Indians are diminishing.

Mountains.] There is a range of mountains which runs through the whole length of the continent, a distance of more than 11,000 miles: and is the longest range of mountains on the globe.

Beginning at the southern extremity of the continent, in lat. 54° S. it runs along the whole western coast of South America, and, crossing the isthmus of Darien, passes into Mexico in North America. After leaving Mexico, it continues in a course west of north, and terminates, it is supposed, on the Frozen Ocean, in about lat. 70° N.

The different parts of this range are called by different names. The part in South America is called the *Andes*; the part in Mexico, the *Cordilleras of Mexico*; and the part north of Mexico, the *Rocky Mountains*. The highest parts of this range are in South America and Mexico. There are many summits from 15,000 to 20,000 feet in height, and several of the loftiest are volcanoes.

Divisions.] America is divided by the isthmus of Darien into North and South America. Between these two divisions are the West-India islands.

NORTH-AMERICA.

Situation.] North America is bounded on the E. by the Atlantic Ocean; on the S. E. it is separated from South America by the isthmus of Darien; on the W. is the Pacific Ocean. The southern extremity is in N. lat. $7^{\circ} 30'$. The limits towards the north have never been ascertained.

Divisions.] The three great divisions of North America are,

1. British America, in the north;
2. The United States, in the middle, and
3. Spanish America, in the south.

These three include the whole of North America, except

4. Greenland (belonging to Denmark) in the northeast, and
5. The Russian Settlements, in the northwest.

The two last are of little extent, and little consequence, and hardly worthy of mention under a general division.

Climate.] The climate on the eastern side of North America is much colder than in the same latitudes in Europe.

Mountains.] There are two great ranges of mountains in North America, the *western* and the *eastern*. The western is by far the longest. It comes from South America, over the isthmus of Darien, and after passing through the whole length of Spanish America, proceeds in a direction west of north, till it terminates on the Frozen Ocean, in about lat. 70° N. In its general course, it is parallel with the coast of the Pacific Ocean, from which it is several hundred miles distant. The part of this range which is in Mexico, is called the *Cordilleras of Mexico*, and the part north of Mexico the *Rocky Mountains*.

The eastern range is wholly within the United States. It runs from southwest to northeast, and in its general course is parallel with the Atlantic coast, from which it is 200 or 300 miles distant. It is called the *Apalachian* range, and embraces two distinct and parallel ridges; the western, or *Alleghany* ridge, and the eastern, or *Blue* ridge.

Bays or Gulfs.] The five largest bays in north America are, *Baffin's Bay*, *Hudson's Bay*, the *Gulf of St. Lawrence*, the *Gulf of Mexico*, and the *Gulf of California*.

Islands.] The most important islands are Newfoundland, Cape Breton, and St. John's, in the Gulf of St. Lawrence; Nantucket and Long-Island, on the coast of the United States; and the Bermuda islands, in lat. 32° N. The West-India islands lie between North and South America.

Lakes.] There are more large lakes in N. America than in any other part of the world. The seven largest are *Slave Lake*, *Lake Winnipeg*, *Lake Superior*, *Lake Michigan*, *Lake Huron*, *Lake Erie*, and *Lake Ontario*. The last five are very near each other, and form a regular chain, by means of short rivers or straits, which run from one to the other.

Rivers.] The principal rivers of North America are, *Mackenzie's*, *Nelson's*, the *St. Lawrence*, the *Mississippi*, the *Missouri*, the *Del Norte*, the *Colorado* and the *Columbia*.

Mackenzie's river empties into the Frozen Ocean in lat. 70 N. This river is the outlet of Slave Lake. Its most distant sources are Unjigah or Peace river, and Athapescow or Elk river; both of which rise in the Rocky mountains. The Athapescow, after passing through Athapescow Lake, unites with the Unjigah, and forms Slave river, which empties into Slave Lake. From Slave Lake to the ocean, the river is called Mackenzie's river.

Nelson's river empties into the western side of Hudson's Bay. It is the outlet of Lake Winnipeg. Its most distant branch is Saskatchewan river, which rises in the Rocky mountains, and flows east into Lake Winnipeg. From Lake Winnipeg to Hudson's Bay it is called Nelson's river.

The *St. Lawrence* empties into the Gulf of St. Lawrence, in lat. 50 N. It is the outlet of the five great lakes, Superior, Huron, Michigan, Erie, and Ontario. Its general course is from S. W. to N. E.

The *Mississippi* empties into the Gulf of Mexico. It rises near the west end of Lake Superior, and flows south. The branches of the Mississippi are mighty rivers. The branches are very numerous, and spread out widely, from the Allegany mountains on the east, to the Rocky mountains on the west.

The *Missouri* is a western branch of the Mississippi. It empties in about lat. 38 N. It rises in the Rocky mountains, and flows southeast. From its source in the Rocky mountains, to the mouth of the Mississippi, in the Gulf of Mexico, is more than 4,500 miles.

Rio del Norte empties into the Gulf of Mexico in lat. 26 N. It rises in the Rocky Mountains, in about lat. 40 N. and its general course is southeasterly.

The *Colorado* empties into the Gulf of California. It rises on the west side of the Rocky mountains, and its general course is southwesterly.

Columbia river empties into the Pacific Ocean in lat. 46° N. Its sources are among the Rocky Mountains.

The length of the abovementioned rivers is estimated as follows:

	Miles.		Miles.
Mackenzie's,	2,000	Mississippi,	3,000
Nelson's,	1,200	Missouri,	4,500*
St. Lawrence,	2,000	Colorado,	1,000
Rio del Norte,	1,300	Columbia,	1,200

Indians.] When North America was discovered, in 1492, the whole continent was in possession of Indians, who generally

* From its source to the mouth of the Mississippi.

lived a wandering life, and gained their subsistence by hunting and fishing.

When the whites first came over, they made a few small settlements on the Atlantic coast. As they increased in numbers, they began to advance into the interior, either purchasing the land of the Indians, or driving them off by force. The whites have now been increasing and advancing for more than three centuries, and the Indians have been diminishing and retreating.

At the present time, the whites are in possession of more than one quarter of North America. They occupy the southeastern part. If we begin on the coast of the Pacific Ocean, and draw a line along the parallel of 30° N. lat. till it strikes the Mississippi river, then up the Mississippi to its source near Lake Superior; then down Lakes Superior, Huron, Erie, and Ontario, and down the river St. Lawrence to its mouth; this line would divide North America into two parts. The whites possess nearly all the continent south and east of this line, and the Indians nearly all north and west of it. In other words, the Indians still own all the northern part of Spanish America, the western part of the United States, and nearly the whole of British America.

The whites are now increasing more rapidly than ever. Their settlements are continually advancing towards the west and north. The Indians are fast melting away before them; and, in the course of a few centuries, probably, there will be scarcely a wandering Indian left in America.

With respect to the country at present occupied by the Indians, comprehending about three quarters of the continent, we know very little about it. Many parts of it were never explored by a white man. We know, in general, that it is inhabited by Indians, who live entirely by hunting and fishing, and of course, that it is in a state of nature, wild and uncultivated. Even the names of the Indian tribes which inhabit this vast country are in many instances unknown.

Arrangement.] In describing North America we shall begin in the north, with Greenland and the Russian settlements, and then proceed to the three great divisions, British America, the United States, and Spanish America.

GREENLAND.

Situation.] Greenland belongs to Denmark. It is in the north-eastern part of North America, having Davis's straits on the west, and the Ocean on the east. How far it extends north has never been ascertained. Towards the south, it terminates in a point, called Cape Farewell.

Climate.] Greenland is one of the coldest countries on the globe. The eastern coast is wholly inaccessible, on account of the mountains of ice, with which it is lined all the year round.

The summers are short; the winters are long and gloomy. In a severe winter many of the inhabitants are commonly frozen to death.

Face of the country.] Greenland is a dreary country. It is principally made up of naked, barren mountains, whose tops are covered with everlasting ice. The interior is wholly inaccessible on account of the ice.

Productions.] In the southern parts of the country there are a few miserable trees, and shrubs of a small stunted growth. There is no wood of a size fit for building houses, and that which is used for fuel is principally drift-wood, which floats in great quantities near the shore, and is picked up by the boats.

The food of the Greenlanders is derived principally from seals, birds, and fishes. Sometimes they are reduced to the necessity of living on sea-weed and train oil; and in very severe winters, many of them starve to death.

Population.] The whole population of Greenland is about 14,000, and is confined to the sea-coast. The Danes and Norwegians have settlements along the coast, which contain in all about 6,000 or 7,000 souls. The number of the natives, 60 or 70 years ago, was estimated at 20,000. It does not now, probably, exceed 7,000. The whole Greenland nation has been diminishing for many years. This is owing to several causes, but especially to the vast accumulation of ice on the coasts.

Religion.] The natives were formerly Pagans, but through the instrumentality of the Moravian missionaries, they have, to a considerable extent been converted to Christianity.

Towns.] There is a Danish settlement called Good Hope, in lat. 64°, and another in Disco bay, called Disco, not far from 68°. New-Herrnhut, Lichtenfels, and Lichtenau are the principal Moravian settlements.

Character and manners.] The natives are of low stature, brawny, and inclined to corpulency. They are indolent, and slow of apprehension, but very quiet and good natured. They are extremely filthy in their mode of living. In winter, they live in huts, made of stone or turf, and several families usually occupy the same building. These huts are warmed by burning train oil and moss in a kind of lamp.

The only employments of the Greenlanders are fishing and hunting. They can never live by agriculture; the climate is too cold, and the soil too sterile.

Before the Moravian missionaries labored among them, the Greenlanders were barbarians. They frequently buried their old women alive, to get rid of the trouble and expense of maintaining them. Children have been known to bury their own parents in this way. But these customs are now abolished, and they have become, to a considerable extent a Christian people.

Animals.] The quadrupeds are rein-deer, foxes, hares, dogs, and white bears. The dogs are used as beasts of burden; and draw the sledges of the Greenlanders 70 miles a day.

Sea fowl, eagles, ravens, and other birds of prey are very numerous. Whales, porpoises and other fish abound on the coast. Greenland is valuable principally on account of its fisheries.

But the animal of most importance to the Greenlander is the seal. It is every thing to him. The flesh of the seal is his principal food; the oil is instead of wood for fuel; out of the skin he makes his boat, tent and clothes; the fibres of the sinews answer for thread; even the bones and entrails are found to be valuable. Catching seals is the principal employment of the inhabitants. It is a difficult and dangerous business; but to excel in it is the highest pride of the Greenlander. The man who cannot catch seals is looked upon with contempt.

RUSSIAN SETTLEMENTS.

The Russian settlements in North America are on the north-west coast. They extend from Cape Prince of Wales, at Behring's straits, near lat. 65° N. to Portlock harbor, near lat. 58°. They contain, in all, about 1000 white inhabitants. The number of Indians tributary to the Russians, is more than 50,000. The principal employment of the Indians is fishing and hunting for the Russians, who pay them for their furs in beads and tobacco. The mode of living and character of these Indians, in many points, resemble those of the Greenlanders.

BRITISH AMERICA.

Situation.] British America comprehends all that part of North America, which lies north of the United States, excepting Greenland and the Russian settlements.

Divisions.] Not more than one tenth part of this vast country is in the possession of the whites. This part is in the southeast, along the banks of the St. Lawrence and the great Lakes, and embraces the island of *Newfoundland*, and the four following provinces.

- | | |
|-------------------|------------------|
| 1. Nova Scotia. | 3. Lower Canada. |
| 2. New Brunswick. | 4. Upper Canada. |

All British America, not included in the above mentioned divisions, is generally called *New Britain*, and is in the possession of the Indians.

Government.] British America is under a governor general, whose residence is at Québec. Besides the governor general, each of the four provinces has a governor, who is styled lieutenant governor. The island of Newfoundland is under the government of an admiral.

NEWFOUNDLAND.

Situation.] Newfoundland is an island, 380 miles long, separated from Labrador by the straits of Bellisle. It is bounded by the Gulf of St. Lawrence on the west, and on all other sides by the Atlantic.

Face of the country.] The country is hilly, and the soil barren; the coasts are high and bold, and abound with fine harbors. The interior of the island has never been explored.

Fisheries.] Newfoundland owes all its importance to the fisheries which are carried on upon its shores, and upon the banks, which lie to the southeast of the island. The *Grand Bank* lies 100 miles from the southeast extremity of the island. It is 300 miles long and 75 broad. East of this is *Green Bank*, 240 miles long, and 120 broad. No less than 3,000 sail of small craft, belonging to Great Britain, France, and the United States, are employed in these fisheries. They are an excellent nursery for seamen.

Towns.] All the principal towns are on the southeast side of the island, in the neighborhood of the fisheries.

St. John's is the capital. It contained in 1815 about 12,000 inhabitants; but three dreadful fires in the winters of 1816 and 1817, laid nearly the whole of the town in ashes. *Placentia* and *Bonavista* are next in size and importance.

Population.] The population is very fluctuating. It depends upon the state of the fisheries. In 1813, when the fisheries were most prosperous, it amounted to nearly 70,000. The largest portion of the settlers has usually been from Ireland.

Religion.] More than three quarters of the inhabitants are Roman Catholics. The rest are Protestants, of various denominations.

Government.] This island belongs to Great Britain, and is under the government of an admiral.

NOVA SCOTIA.

Situation.] Nova Scotia is a narrow peninsula, more than 300 miles long, stretching from southwest to northeast. It is bounded on the north by the Gulf of St. Lawrence; on the west by the Bay of Fundy; on the northwest by the province of New Brunswick; and on all other sides by the Atlantic Ocean.

History.] No settlements, of any consequence, were made in this country till the year 1749. In that year the English government sent out a colony of about 3000 persons, who settled at Halifax. For several years, they were much disturbed by the French from Canada, and the Indians; but the conquest of Canada by the English in 1760, put an end to these troubles; emigrants then came over from England in great numbers, and the colony has ever since advanced rapidly in wealth and population.

Divisions.] Nova Scotia is divided into 9 counties, which are subdivided into 37 townships.

<i>Counties.</i>	<i>Chief Towns.</i>	<i>Counties.</i>	<i>Chief Towns.</i>
Halifax,	{ Halifax,	Shelburne,	Shelburne.
	{ Truro.	Queen's,	Liverpool.
Hants,	Windsor.	Lunenburg,	Lunenburg.
King's,	Cornwallis.	Sydney,	Manchester.
Annapolis,	Annapolis.	Cumberland,	Cumberland.

Population.] The population is estimated at more than 100,000. The great body of the people are of English origin; principally emigrants from New England. After these, the Scotch and Irish settlers are most numerous. The Mickmack Indians were the aborigines of the province, and still inhabit the shore east of Halifax. They are diminishing in numbers.

Religion and Learning.] The established religion is that of the Church of England. There is one Bishop, whose diocese includes Nova Scotia, New Brunswick, and the islands of Cape Breton and Prince Edward.

There is a College at Windsor, which has a valuable library, and several scholarships. Schools are established in all the villages.

Chief Towns.] HALIFAX, the capital, is situated on Chebucto Bay, in the centre of the peninsula. It has a spacious and commodious harbor, of a bold and safe entrance. It is the principal naval station, belonging to Great Britain, in North America. The population is 15,000.

Liverpool is on the Atlantic coast, 45 miles S. W. of Halifax, and has considerable trade. Pictou, on the gulf of St. Lawrence, 100 miles N. E. of Halifax, has a fine harbor. Great quantities of timber are exported from Pictou to Great Britain.

Roads and Commerce.] Intercourse between the different parts of the country is easy. Roads have been made at considerable expense, from Halifax to all the towns in the province; and pack-ets carry the mail regularly, between Nova Scotia and New Brunswick, over the Bay of Fundy.

The commerce and wealth of Nova Scotia have increased, of late, with great rapidity. Fish and lumber are the staple commodities, and are exported in great quantities to Great Britain, and the West Indies.

Soil.] The N. E. shores present a gloomy and barren aspect. But the counties to the S. W. of Halifax, and along the Bay of Fundy, have a rich soil, and produce good crops of grain.

Bays.] The bays and harbors on the coast of Nova Scotia are very numerous. The Bay of Fundy is remarkable for its tides, which rise in some parts to 40 feet, and in some to 60. The rise of the tide is so rapid, that cattle feeding on the shore, are often suddenly overtaken by it, and drowned.

Islands.] *Prince Edward's* island, formerly called *St. John's*, is more than 100 miles long. It is in the Gulf of St. Lawrence, west of Cape Breton, and near the northern coast of Nova Scotia. The principal town is Charlottetown. The population of the island is about 5000.

NEW BRUNSWICK.

Situation.] New Brunswick is bounded on the N. by Lower Canada; on the E. by the Gulf of St. Lawrence; on the S. E. by Nova Scotia, and the Bay of Fundy; on the W. by Maine and Canada.

Chief Towns.] *Frederickton* is the capital. It is on St. John's river, about 80 miles from the mouth, at the head of sloop navigation.

The city of *St. John's* is the largest town. It is near the mouth of St. John's river, and contains upwards of 2,000 inhabitants.

Population.] The population of the province is estimated at more than 60,000.

Bays.] The principal bays are Passamaquoddy, bordering on Maine; the Bay of Fundy; Chignecto bay, which is an arm of the bay of Fundy; Merramichi and Chaleur bays, which communicate with the Gulf of St. Lawrence.

Rivers.] *St. John's* river is the principal river in the province. It rises in Maine, and empties into the Bay of Fundy. It is navigable for sloops 80 miles, and for boats, 200. The common route from the city of St. John's to Quebec is up this river.

Merramichi river empties into Merramichi bay. It abounds with salmon.

Soil and Productions.] The lands on the rivers, especially on St. John's river and its branches, are very rich and fertile. The pines on this river are the largest in British America, and afford a considerable supply of masts for the British navy.

The timber with which the uplands are covered, and the cod-fish, salmon, and herring, which abound in the rivers, and on the coasts, are the principal productions of the country, and are exported in considerable quantities.

LOWER CANADA.

Situation.] Lower Canada lies on both sides of the river St. Lawrence, from its mouth to Lake St. Francis. It is bounded N. by New Britain; E. by the Gulf of St. Lawrence; S. E. and S. by New Brunswick, Maine, New Hampshire, Vermont, and New York. S. W. and W. by Upper Canada.

Name.] According to father Hennepin, "the Spaniards were the first who discovered Canada; but at their first arrival, having discovered nothing considerable in it, they abandoned the country, and called it *Il Capo di Nada*, that is, a *Cape of Nothing*; hence by corruption sprung the word CANADA."

Divisions.] Lower Canada is divided into districts, which are subdivided into counties. The counties are divided into townships, seignories, and parishes.

Chief Towns.] QUEBEC, the capital of Lower Canada, and of all British America, stands on the north side of the St. Lawrence, at its confluence with the river St. Charles, about 350 miles from the sea. The town is divided into Upper and Lower. The Upper town, which is built on a high steep rock, is a place of great natural strength, and is extremely well fortified.—The Lower town is much the smallest part, and is inhabited principally by tradesmen and sailors. It is situated at the foot of the rock; and from the fortifications of the Upper town, you look down upon it as from a very high steeple; when the cannon of the fortifications are discharged, the balls fly far above the tops of the highest houses. The population of the city, in 1818, was 15,257. The country around Quebec presents a most sublime and beautiful scenery.

Montreal is situated on the east side of an island in the St. Lawrence, at the head of ship navigation. It is 180 miles above Quebec, and 200 below Lake Ontario. The population, in 1818, was estimated at 25,000. The commerce of the city is extensive; the principal branch is the fur trade.

Trois Rivières or *Three Rivers* is pleasantly situated, on the north side of the St. Lawrence, half way between Quebec and Montreal, 90 miles from each. It was formerly the seat of the French government. It contains about 2,500 inhabitants.

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Three Rivers or Three Rivers is pleasantly situated, on the north side of the St. Lawrence, half way between Quebec and Montreal, 80 miles from each. It was formerly the seat of the French government. It contains about 2,500 inhabitants.

Sorelle is on the S. side of the St. Lawrence, half way between Montreal and Three Rivers, 45 miles from each.

Population.] Lower Canada contains about 300,000 inhabitants, a majority of whom are of French origin. The principal settlements are along the banks of the St. Lawrence.

Religion.] A majority of the inhabitants are of the Roman Catholic religion; but Presbyterians, Baptists, Methodists, and other Protestant sects are fast increasing in numbers.

History.] This country was settled by the French in 1608, and remained in their possession until 1759, when an English army, under General Wolf, took Quebec; and soon after, the whole province surrendered to the British.

At the commencement of the American revolution in 1775, this province was invaded by the American troops;—Montreal was taken, and an attack was made upon Quebec, but it failed; General Montgomery was slain, and his troops were routed.

Manufactures and Commerce.] Ship-building is carried on at Quebec and Sorelle with considerable success. Flour, biscuit, and pot-ashes, are extensively manufactured for exportation. The sugar consumed in the interior is manufactured from the sap of the maple. A few coarse linen and woollen cloths are made for home consumption.

The imports of Canada, before the conquest by the British, in the most flourishing years, amounted to 160,000*l.* sterling, and its exports to 80,000*l.* Twelve vessels only were engaged in the fishery, and six in the West India trade. The exports, at that time, consisted wholly of furs and fish. In 1802 the exports exceeded half a million sterling. Besides furs and fish, there were exported in that year 1,010,000 bushels of wheat, 38,000 barrels of flour, 32,000 cwt. of biscuit, large quantities of pot-ashes, and considerable quantities of American ginseng. In the export of these articles 211 vessels were employed, amounting to 36,000 tons. In 1810, the number of vessels had increased to 661, and their tonnage amounted to 143,393.

Climate.] Winter commences early in November, and lasts till April. The cold is so intense that the largest rivers are frozen over, and even the mercury in the thermometer often reduced to a solid state. The ice on the rivers is usually two feet thick, and that close to the banks of the St. Lawrence, is commonly 6 feet. The snow usually lies from 4 to 6 feet deep. The spring is extremely short, and vegetation surprisingly rapid. The thermometer, in July and August, frequently rises above 80° and sometimes above 90°.

Face of the country, &c.] Several ranges of mountains run from the coast into the interior, in parallel ridges. The valleys between, have a fertile soil, yielding grass and grain in abundance. The greater part of the country is still covered with forests.

Rivers.] The *St. Lawrence* runs through this province from southwest to northeast, and empties into the Gulf of St. Lawrence.

The *Outawas* river empties into the St. Lawrence, near Montreal. It rises in the high lands, between Lake Huron and Hudson's Bay.—The *Sorelle* and the *St. Francis* empty into the St. Lawrence from the south, between Montreal and Quebec. The *Sorelle* is the outlet of Lake Champlain.—The *Chaudiere* comes from the south, and empties into the St. Lawrence near Quebec.

Natural Curiosities.] The celebrated falls of Montmorency are near the mouth of a river of the same name, which empties into the St. Lawrence, 9 miles below Quebec. The river pours over a precipice, and instantly falls perpendicularly to the astonishing depth of 246 feet, presenting a scene of wonderful beauty and grandeur. These falls are in full view, as you sail up and down the St. Lawrence.

Island. The island of *Cape Breton*, in the Gulf of St. Lawrence is attached to this province. It lies northeast of Nova Scotia, from which it is separated by a narrow strait, called the Gut of Canso. In 1743, when this island belonged to France, the fisheries on its shores were very productive, and employed no less than 27,000 seamen. At present, the principal employment of the inhabitants is the working of the coal mines. The population of the island is about 3,000.

UPPER CANADA.

Situation.] Upper Canada is that peninsular tract of country which lies between the river Outawas and the great Lakes, Ontario, Erie and Huron. It is bounded on the east, south and west by the United States, from which it is separated by the St. Lawrence and the Lakes; on the northeast by Lower Canada, from which it is separated by Outawas river; on the northwest by New Britain.

Divisions.] The settled part of this province is divided into 8 districts, which are subdivided into 24 counties, and these are again divided into 156 townships.

<i>Districts.</i>	<i>Where situated.</i>	<i>Chief Towns.</i>
Eastern,	on the St. Lawrence,	Cornwall.
Johnstown,	do.	Prescott.
Midland,	on Lake Ontario,	Kingston.
Newcastle,	do.	Newcastle.
Home,	do.	York.
Niagara,	on Niagara river,	Queenstown.
London,	on Lake Erie,	
Western,	on Lake St. Clair,	Sandwich.

Population.] Upper Canada is a newly settled country, and the population increases with great rapidity. In 1783 it was estimat-

ed at only 10,000 ; in 1814 at 83,000. It will probably continue to increase rapidly for many years. The settlements, at present, are confined to the neighborhood of the St. Lawrence, and the shores of the great lakes ; but they are fast extending into the interior. The settlers are principally emigrants from the United States.

Face of the Country, Soil, &c.] The country on the St. Lawrence and the lakes is a fine level country, with a rich soil, well adapted for cultivation. There is a great quantity of fertile land, at present unoccupied, in this province, but the settlements are fast extending over it. Much of the interior of the province has never been explored.

Chief Towns.] York is the seat of government. It is regularly laid out, on the northwest side of Lake Ontario, has a beautiful and commodious harbor, and about 3,000 inhabitants.

Kingston stands at the egress of the St. Lawrence from Lake Ontario. It is the most flourishing town in the province, and contains about 2,000 inhabitants. It has an excellent harbor, and in time of war is the principal station for the British shipping on Lake Ontario.

Newark is at the mouth of Niagara river where it enters Lake Ontario. *Queenstown* is on the same river, 7 miles from Newark. *Chippeway* is on the same river, 10 miles above Queenstown, and 3 above Niagara falls. *Fort Erie* is at the head of Niagara river, at its egress from Lake Erie. *Malden* and *Sandwich* are south of Detroit, on the river which connects Lake St. Clair with Lake Erie.

Lakes.] Besides the great Lakes Ontario, Erie and Huron, which are on the boundary of the province, there is a chain of small lakes stretching from Lake Huron to Lake Ontario. The first is Lake Simcoe, which discharges itself through Severn river into Lake Huron. Near Lake Simcoe are the *Shallow* lakes which run through a short river into *Rice* lake. Rice lake empties itself through Trent river into the Bay of Quinte, which opens into Lake Ontario near Kingston. Lake *Nepissingui* is a large lake, which empties itself into the north side of Lake Huron, through French river.

Rivers.] The following rivers make a part of the boundary of the province : *Outawas* river, which separates it from Lower Canada ; the *St. Lawrence*, which separates it from New York ; *Niagara* river, which connects Lake Erie with Lake Ontario, and separates the province from New York ; the river *St. Clair*, which connects Lake Huron with Lake St. Clair and separates the province from Michigan Territory.

Grand river is a large stream, which falls into Lake Erie, near the east end. The land for six miles on each side of this river, from its mouth to its source, is in the possession of the Six Nations of Indians.

The *Thames* rises near the sources of Grand river, and flows southwest into Lake St. Clair.

Bay.] The bay of Quinti is a long narrow harbor, at the north-east end of Lake Ontario. It is 70 miles long, and from 1 to 6 broad, and affords safe navigation through its whole length.

Commerce.] The commerce of this province hitherto, has been carried on principally through the St. Lawrence; but when the great canal from Lake Erie to Hudson river is completed, the trade of the western part of the province will probably go through that channel. The principal exports are wheat, and other agricultural productions.

Religion.] The inhabitants have recently emigrated from various parts of the United States, and, as might be expected, are of many different religious denominations. The Methodists are most numerous; next to them are the Baptists and Presbyterians. Like all newly settled countries the province is poorly supplied with regular ministers.

Roads.] Tolerably good roads have been made at the expense of the government, through all the principal settlements. Nearly the whole revenue of the province has, for several years, been expended by the King in opening new roads.

Climate.] The province is in a more southern latitude than Lower Canada, and the climate is much warmer.

NEW BRITAIN.

Situation.] New Britain comprehends all that part of British America, which lies north and northwest of Upper and Lower Canada. It is a vast country, extending from the Atlantic Ocean on the east, to the Pacific on the west; and from Canada and the United States on the south, to the Frozen Ocean on the north.

Divisions.] Hudson's Bay divides this country into two parts, the eastern and the western. The eastern is subdivided into *Labrador* and *East Main*; and the western into *New South Wales* and *New North Wales*.

Face of the Country.] This is a dreary desolate country. The surface, to a great extent, is naked rock, or covered with a soil so thin, that nothing but moss and shrubs, or stunted trees can grow upon it. There are innumerable lakes and ponds of fresh water scattered over the whole country.

Bays.] The two principal bays are *Baffin's* and *Hudson's*. The southern part of Hudson's Bay is called *Jam's Bay*.

Lakes.] The small lakes are too many to be enumerated. The three largest are *Slave Lake*, *Athapescow Lake* or *Lake of the hills*, and *Lake Winnipeg*.

Rivers.] *Mackenzie's* river, which is the outlet of *Slave Lake*, and *Nelson's* river, which is the outlet of *Lake Winnipeg*, are among the greatest rivers in North America. *Unjigah* and

Athapescow rivers are the remote sources of Mackenzie's river; and the *Saskatchewan* is the remote source of Nelson's river.

Churchill and *Severn* rivers empty into the western side of Hudson's Bay. *Albany*, *Moose* and *Rupert* rivers empty into the southern part of James Bay.

Productions.] The climate is so cold, and the soil so barren, that nothing of the vegetable kind can flourish here. Wild animals are abundant. The principal are beavers, bears, deer, raccoons and musquashes.

Fur trade.] New Britain is the region of the fur trade. On all the principal lakes, and at the mouths and forks of nearly all the considerable rivers, there are trading houses, established by the English. Here the Indians bring the furs of the animals which they kill in hunting, and sell them for blankets, guns, powder, beads, &c.

The fur trade is carried on by two companies of merchants; the *Hudson's Bay Company*, and the *Northwest Company*. The trade of the former is confined to the neighborhood of Hudson's Bay; that of the latter extends from Lake Winnipeg to the Rocky mountains and the Frozen Ocean.

The northwest company was formed in 1783, and is composed principally of Montreal merchants. They employ in the concern 50 clerks, 71 interpreters and clerks, 1120 canoe-men, 35 guides, and about 140 canoes. Each canoe will carry about 3,400 lbs. weight, and is navigated by 3 or 10 men. These canoes compose two fleets, each of which starts every other year from Montreal, loaded with coarse linen and woollen cloths, blankets, arms, ammunition, tobacco, hats, shoes, stockings, &c. obtained from England; and spirituous liquors and provisions purchased in Canada. These goods are carried to the Indian country and exchanged for furs.

Mode of travelling.] The only mode of travelling, in this desolate country, is in birch bark canoes. With these the inhabitants pass up and down the rivers and lakes, and when they meet with a rapid, or wish to pass from one river to another, they get out of the canoe and carry it on their shoulders. In this way, the men engaged in the fur trade travel thousands of miles, and carry all their goods.

Settlements.] The Moravian missionaries have 3 small settlements among the Esquimaux Indians, on the coast of Labrador, viz. *Okkak Nain*, and *Hopedale*. These, and the forts and houses established by those engaged in the fur trade, are the only settlements of white men. The principal forts are Fort *Chepewyan* on Athapescow Lake, *Churchill*, at the mouth of Churchill river, and *York* at the mouth of Nelson's river.

Inhabitants.] The Esquimaux Indians inhabit the coast of Labrador, and the shores of the Frozen Ocean. They are of the same race with the Greenlanders. Like them they live principally on seals and whales, and confine themselves to the sea coast. The interior is inhabited by various tribes of Knisteneaux and Chepewyan Indians. Their number is unknown.

UNITED STATES.

Situation and Extent.] The United States is the great middle division of North America. It is bounded N. by New Britain and the Canadas; E. by New Brunswick and the Atlantic ocean; S. by the gulf of Mexico; S. W. by the Spanish dominions, and W. by the Pacific ocean.

The boundary on the side of the Spanish dominions, according to the treaty with Spain, ratified in 1821, begins on the gulf of Mexico, at the mouth of the river Sabine, and proceeds along the west bank of that river to the 32d degree of N. lat.; thence, by a line due north, to Red river; thence up that river to the meridian of 100° W. lon. thence due north, along that meridian to the river Arkansas; thence, along the south bank of the Arkansas to its source; thence, due north or south, as the case may be, to the parallel of 42° N. lat. and thence, along that parallel, to the Pacific ocean. On the side of the British dominions, the boundary begins in the Atlantic ocean, at the mouth of the river St. Croix, and proceeds up that river to its source; thence, due north, to the highlands which separate the waters falling into the St. Lawrence from those which fall into the Atlantic; thence, along those highlands, in a S. W. direction, to the parallel of 45° N. lat.; thence, along that parallel to the river St. Lawrence; and thence, up that river, and the great lakes, Ontario, Erie, Huron and Superior, to the most northwestern point of the lake of the Woods. By the treaty with Great Britain in 1819, the boundary line proceeds from the last mentioned point, due north or south, as the case may be, to the parallel of 49° N. lat. and thence, due west along that parallel to the Rocky mountains. The boundary between the Rocky mountains and the Pacific ocean remains unsettled.

Including Florida, which has been ceded by Spain, the territory of the United States extends from 25° to 49° N. lat. and from 66° 49' to 125° W. lon. embracing 2,000,000 square miles.

Divisions.] This extensive country is divided into 24 States, 1 District and 6 Territories. The States are usually classed under four divisions, *Eastern, Middle, Southern and Western.*

	States,	Sq. miles,	Population in 1820.	Pop. on a sq. m.
EASTERN STATES.	1. Maine,	31,750	298,335	10
	2. New Hampshire,	9,491	244,161	26
	3. Vermont,	10,212	235,764	23
	4. Massachusetts,	7,350	523,287	72
	5. Rhode Island,	1,580	83,059	53
	6. Connecticut,	4,764	275,248	58
MIDDLE STATES.	7. New-York,	46,000	1,372,812	30
	8. New Jersey,	8,320	277,575	33
	9. Pennsylvania,	46,000	1,049,398	23
	10. Delaware,	2,120	72,749	34
	11. Maryland,	13,959	407,350	29

	States.	Sq. miles.	Population in 1820.	Pop. on a sq. m.
SOUTHERN STATES.	12. Virginia,	64,000	1,065,366	17
	13. North-Carolina,	48,000	638,829	13
	14. South-Carolina,	24,000	490,309	20
	15. Georgia,	60,000	340,939	6
	16. Alabama,	44,000	127,901	3
	17. Mississippi,	45,000	75,448	2
	18. Louisiana,	48,000	153,407	3
WESTERN STATES.	19. Tennessee,	40,000	422,813	11
	20. Kentucky,	42,000	564,317	13
	21. Ohio,	39,000	581,484	15
	22. Indiana,	36,000	147,178	3
	23. Illinois,	52,000	55,211	1
	24. Missouri,	60,000	66,586	1
	District of Columbia,	100	38,039	330
TERRITORIES	Michigan,	40,000	8,896	
	Northwest,	140,000		
	Arkansas,		14,273	
	Missouri,	1,000,000		
	Oregon,			
	Florida,	50,000	15,000	

Seas Bays and Sounds.] The territory of the United States is washed by three seas; the Atlantic ocean on the east; the gulf of Mexico on the south; and the Pacific ocean on the west. The principal bays and sounds on the Atlantic border are, *Passamaquoddy bay*, which lies between Maine and the British province of New-Brunswick; *Massachusetts bay*, between cape Ann and cape Cod, on the coast of Massachusetts; *Long island sound*, between Long island and the coast of Connecticut; *Delaware bay*, which sets up between cape May and cape Henlopen, and separates New Jersey from Delaware; *Chesapeake bay*, which communicates with the ocean between cape Charles and cape Henry, and extends in a northerly direction for 200 miles through the states of Virginia and Maryland; and *Albemarle and Pamlico sounds* on the coast of North Carolina. There are no very large bays or sounds on the coast of the gulf of Mexico or of the Pacific ocean.

Face of the Country.] This country is intersected by two principal ranges of mountains; the Rocky mountains in the west, which run across the territory in a direction nearly parallel with the coast of the Pacific ocean, at the distance of several hundred miles; and the Alleghany mountains in the east, which run nearly parallel with the Atlantic coast from Georgia, through Tennessee, Virginia and Pennsylvania to New-York. The immense valley included between these two ranges of mountains is intersected by the Mississippi river, which runs from north to south through the whole length of the United States. The country west of the Mississippi, with few exceptions, is a wilderness inhabited by savage Indians, and beyond the meridian of 94° the whites have scarcely

a solitary settlement; but the country on the east of the Mississippi is, to a considerable extent, cultivated and populous.

In that part of the United States which lies east of the Mississippi, the most remarkable feature in the face of the country is the low plain, from 50 to 100 miles wide, which extends along the Atlantic coast, from Long island to the gulf of Mexico; a distance of more than 1,000 miles. Beyond this plain the country rises towards the interior till it terminates in the Alleghany mountains.

Lakes.] All the large lakes in the United States are on or near the northern boundary, where they form a connected chain extending through a distance of more than 1,000 miles. 1. *Lake Superior*, the first in the chain, is the largest body of fresh water on the globe, being 490 miles long and 1,700 in circumference. It discharges its waters at its S. E. extremity through the straits of St. Mary into lake Huron. 2. *Lake Huron*, the second in the chain, is 218 miles long from east to west in the widest part, and 130 from north to south, and is estimated to contain 5,000,000 acres. It is connected on its N. W. side with lakes Superior and Michigan, and discharges itself at its southern extremity through St. Clair river into lake St. Clair. 3. *Lake St. Clair* is 90 miles in circumference, and discharges itself into lake Erie through Detroit river. The bottom of the lake is said to be a perfect plain, the depth being invariably 21 feet except near the shore. 4. *Lake Erie* is 290 miles long from S. W. to N. E., in the widest part 63½ broad, and discharges itself at its N. E. extremity through Niagara river into lake Ontario. 5. *Lake Ontario* is 171 miles long and 60 in its greatest breadth, and discharges itself into the ocean through the river St. Lawrence, which issues from it at its N. E. extremity. 6. *Lake Michigan*, the largest lake which lies wholly in the United States, is 260 miles long. On the N. E. it communicates with lake Huron through the straits of Michillimackinac, and on the N. W. it branches out into two bays, one called Noquet's bay and the other Green bay. 7. *Lake Champlain* lies between the states of New-York and Vermont. It is 128 miles long, and from half a mile to 16 miles broad, and discharges itself at its northern extremity through the river Sorelle into the St. Lawrence.

Rivers.] The principal rivers of the United States may be divided into four classes. *First*, those which drain the waters of the country included between the Alleghany and Rocky mountains; *Secondly*, the rivers which discharge themselves into the Atlantic ocean, all of which are east of the Alleghany mountains; *Thirdly*, the rivers south of the Alleghany mountains, which discharge themselves into the gulf of Mexico; *Fourthly*, the rivers west of the Rocky mountains, all of which discharge themselves through the Columbia into the Pacific ocean.

The principal rivers which drain the waters of the country between the Alleghany and Rocky mountains are the Mississippi and its branches. The *Mississippi* rises west of lake Superior in

lat. $47^{\circ} 47'$ N. and lon $95^{\circ} 6'$ W. amidst lakes and swamps, dreary and desolate beyond description, and after a S. E. course of about 600 miles reaches the falls of St. Anthony in lat. 44° N. where it descends perpendicularly 40 feet. From these falls it pursues at first a southeasterly and then a southerly direction, and after forming the boundary between Missouri, Arkansas territory, and Louisiana on one side, and Illinois, Kentucky, Tennessee and Mississippi on the other, discharges itself through many mouths into the gulf of Mexico. It is more than 3,000 miles long and is navigable for boats of 40 tons to the falls of St. Anthony. The following are the principal tributaries of the Mississippi from the east.

1. The *Ouisconsin*, a rapid river, which joins it between the parallels of 42° and 43° N. lat. 2. The *Illinois*, a navigable river, which rises in the N. W. part of Indiana, and after a circuitous course of 400 miles through the state of Illinois, joins the Mississippi near lat. $38^{\circ} 40'$ N. 3. The *Ohio*, which is formed by the union of the Alleghany and Monongahela rivers at Pittsburg, in the western part of Pennsylvania. It flows in a southwesterly direction for 945 miles, separating the states of Ohio, Indiana, and Illinois from Virginia and Kentucky, and falls into the Mississippi in 37° N. lat. Its current is very gentle and nowhere broken by any considerable falls, except at Louisville in Kentucky, where the water descends $22\frac{1}{2}$ feet in 2 miles, producing a very rapid current; yet boats have notwithstanding frequently ascended. The chief tributaries of the Ohio are, the *Wabash*, a fine navigable river, which rises in the N. E. part of Indiana, and flowing in a southwesterly direction falls into the Ohio after a course of 500 miles, during the last half of which it forms the boundary between Indiana and Illinois; the *Cumberland*, which rises in the mountains on the eastern boundary of Kentucky, and running into Tennessee, makes a circular bend, passes again into Kentucky, and joins the Ohio after a course of 600 miles, for 500 of which it is navigable; and the *Tennessee*, which is formed by several streams from the western part of Virginia and the Carolinas, which unite a little west of Knoxville in the state of Tennessee; it runs at first S.W. into Alabama and then turns and flowing N.W. through Tennessee into Kentucky, joins the Ohio 10 miles below the mouth of the Cumberland. 4. The *Yazoo*, which rises in the northern part of the state of Mississippi, and running S. W. joins the Mississippi 100 miles above Natchez.—The following

are the principal tributaries of the Mississippi from the west. 1. The *St. Peter's*, which joins it about 9 miles below the falls of St. Anthony, after a S.E. course of several hundred miles. 2 The river *des Moines*, which joins it near the parallel of 40° N. lat. after a S. E. course of more than 800 miles. 3. The *Missouri*, which is formed by three branches, called Jefferson, Madison, and Gallatin rivers, all of which rise in the Rocky mountains, between 42° and 48° N. lat. and unite at one place in lat. $45^{\circ} 10'$ N. and lon. 110° W. From the confluence of these streams to the Great Falls, the course of the river is northerly; thence to the Mandan villages, easterly; and from the Mandan villages to the

junction with the Mississippi it runs first south and afterwards S. E. The whole length from the highest navigable point of Jefferson's river to the confluence with the Mississippi is 3,096 miles, and to the gulf of Mexico 4,491; during the whole of which distance there is no cataract or considerable impediment to the navigation, except at the Great Falls, which are 2,575 miles from the Mississippi. At these falls the river descends in the distance of 13 miles 362 feet.—The principal tributaries of the Missouri are the *Yellowstone*, which rises in the Rocky mountains between lat. 43° and 44° N. and joins it after a northeasterly course of 1,100 miles; the *Platte*, which rises in the Rocky mountains and after an easterly course of 1,600 miles joins the Missouri in lat. 41° N. and the *Kansas*, which joins it near lat. 39° N. after an easterly course of more than 1,000 miles. 4. The *Arkansas*, which rises in the Rocky mountains in about lat. 41° N. and pursuing a southeasterly course, forms for some distance the boundary between the United States and Mexico, after which its course lies principally in Arkansas territory till it joins the Mississippi. Its length is more than 2,000 miles. 5. *Red river*, which rises in the Rocky mountains in about lat. 37° N. and after a southeast course of more than 1,200 miles, falls into the Mississippi in lat. 31° N.

The following are the principal rivers east of the Allegany mountains; 1. *The Connecticut*, which rises in the highlands separating the United States from Lower Canada, and running south divides New Hampshire from Vermont, and passing through Massachusetts and Connecticut falls into Long Island sound. It is navigable for sloops 50 miles, to Hartford, and by means of canals and other improvements has been rendered passable for boats 250 miles further. 2. *The Hudson*, which rises west of lake Champlain, and pursuing a southerly course of more than 300 miles falls into New York bay. It is navigable for ships to Hudson, 130 miles; and for large sloops 30 miles further, to Albany near the head of the tide. 3. *The Delaware*, which rises in New York, and flowing south separates Pennsylvania from New York and New Jersey, and falls into Delaware bay after a course of 300 miles. It is navigable for ships of the line 40 miles, to Philadelphia, and for sloops 35 miles further to the head of the tide at Trenton falls. 4. *The Susquehannah*, which rises in New York and pursuing a southerly zig zag course through Pennsylvania, falls into the head of Chesapeake bay near the N. E. corner of Maryland. During the last 50 miles the navigation is obstructed by an almost continued series of rapids. 5. *The Potomac*, which rises in the Alleghany mountains, and after forming during its whole course the boundary between Maryland and Virginia falls into Chesapeake bay. It is navigable for sloops of the greatest burden to the city of Washington, 300 miles, but in the upper part of its course there are numerous obstructions, many of which have been overcome by canals. 6. *James river*, which rises in the Alleghany mountains, and pursuing a course S. of E. wholly in Virginia, falls into the southern part of Chesapeake bay. It is navigable for sloops to Richmond, where the Great

Falls formerly presented an obstruction, but a canal has been made around them, and the river is now navigable for batteaux for 230 miles above the city. 6. *The Savannah*, which forms the boundary between South Carolina and Georgia, and falls into the Atlantic in lat. 32° N. It is navigable for large vessels to Savannah, 18 miles; and for boats to Augusta, 340 miles further.

The following are the principal rivers, which rise south of the Alleghany mountains and fall into the gulf of Mexico. 1. *The Appalachicola*, which discharges itself into the western part of Apalachy bay in Florida. It is formed by the union of the Chatahoochee and Flint rivers, the former of which rises in the northern part of Georgia, and flowing south receives Flint river at the S. W. extremity of Georgia. During the latter part of its course the Chatahoochee forms the boundary between Georgia and Alabama. 2. *The Mobile*, in Alabama, which discharges itself into Mobile bay. It is formed by two large rivers, the *Alabama* and *Tombigbee*, which unite near lat. 31° N. after having pursued, each, a separate course of many hundred miles.

The principal rivers west of the Rocky mountains are the *Columbia* and its branches. *Columbia river* rises in the Rocky mountains near lat. 55° N. and running S. W. falls into the Pacific ocean in lat. $46^{\circ} 15'$ N. after a course of 1,500 miles. Its principal tributaries are *Clarke's river*, *Lewis' river*, and the *Multnomah* or *Wallamut*, all of which join it on the left bank. Vessels of 300 tons may ascend the *Columbia* to the mouth of the *Multnomah*, 125 miles, and large sloops to the head of the tide, 60 miles further.

Inland Navigation.] Numerous canals have been proposed for connecting the great rivers, bays and lakes, in various parts of the country, some of which are already completed, and others in a course of execution. The principal are the following: 1. *The Middelsex canal*, which lies wholly in Massachusetts. It is 31 miles long and connects Boston harbor with Merrimack river, thus opening an easy communication between Boston and the interior of New Hampshire. It was completed in 1804. 2. *The Champlain canal*, which lies wholly in N. Y. is 22 miles long and connects lake Champlain with the Hudson. It was completed in 1820. 3. *The Erie canal*, extending from lake Erie to the Hudson, 350 miles, is the greatest work of the kind ever undertaken in America. It is wholly in the state of New York, and will probably be completed in 1823, at an expense of about \$5,000,000. 4. A canal has been proposed to connect *James river* with the Ohio. The board of public works in Virginia have recently reported in favor of its practicability and expediency. 5. *The Chesapeake and Albemarle canal* lies partly in Virginia and partly in North Carolina, and connects Chesapeake bay with Albemarle sound. 6. *The Santee canal*, 22 miles long, is wholly in South Carolina, and connects Santee river with Charleston harbor. 7. A canal for sloops from *Massachusetts bay* to *Buzzard's bay* across the isthmus which connects the peninsula of cape Cod with the continent has been proposed, and a company has been incorporated

by the legislature of Massachusetts for carrying the plan into execution. 8. A canal for sloops has been proposed through the centre of New Jersey, designed to connect, with the aid of intervening streams, *New York bay with Delaware river*. A company was incorporated in New Jersey many years ago for this purpose, and a survey of the intended route was made, from which the practicability of the plan was ascertained. 9. A canal has been commenced across the isthmus which separates Delaware river from Chesapeake bay. 10. Two canals have been proposed for connecting rivers which fall into lake Erie with navigable branches of the Ohio, and Congress have granted 100,000 acres of land for carrying each of these plans into execution. 11. A canal has been proposed to connect the head waters of *Illinois river with lake Michigan*, and Congress have also appropriated 100,000 acres of land towards defraying the expense of this project. Besides these there are numerous other canals of minor importance, particularly around the falls in the great rivers.

Climate.) The territory of the United States, extending through 24 degrees of latitude, presents of course a great variety of climate. As a general remark, however, it is every where much colder than in the same parallels in Europe, and the difference has been commonly estimated as equivalent to 8 or 10 degrees of latitude. The country on the Ohio has been commonly considered warmer in the same parallels than the Atlantic states. The difference was supposed by Mr. Jefferson to equal what would result from three degrees of latitude. Accurate observations, however, which have been made at Cincinnati for a series of years, prove that there is no foundation for this opinion; or at least, if there be a difference, it cannot equal one third of what has been mentioned. The opinion that the climate on the Ohio is more moist and more liable to sudden and extreme changes than that of the eastern states is equally erroneous. In the flat country of the southern states the summers are hot and unhealthy; the months of July, August and September are here denominated the sickly season, but the rest of the year is generally mild and pleasant. In New England the climate is healthy, but in the spring of the year bleak and piercing east winds prevail, which are very disagreeable. In Florida, the climate is favorable to the production of tropical fruits, and it is supposed that coffee, cocoa and sugar might be raised there abundantly.

Soil and Productions.) The soil is generally fertile and capable of supporting a dense population. The principal production of the states south of Virginia and Kentucky, is cotton. Tobacco is raised in large quantities in Maryland and Virginia. Wheat is the staple production of the Middle and Western States. In the Eastern states a considerable portion of the soil is devoted to pasturage. Rice is cultivated to a considerable extent in the swamps of Georgia and the Carolinas. The sugar cane flourishes in Louisiana as high as the parallel of 30° N. lat. The vine has, within a few years, been successfully cultivated in Indiana, and it is sup-

posed that the climate would be equally favorable in Virginia, the Carolinas, Kentucky and Tennessee.

Population.] The population of the United States, in 1790, was 3,929,326 ; in 1800, 5,305,666 ; in 1810, 7,239,903, and in 1820, 9,625,734 ; of whom 1,531,436 were slaves and 233,592 free blacks. The population increases very regularly at the rate of about 3 per cent. per annum, doubling in less than 25 years. The inhabitants consist of whites, negroes and Indians. The negroes are generally slaves, and are principally confined to the states south of Pennsylvania and the river Ohio. All the whites are of European origin ; principally English. The New-Englanders, Virginians, and Carolinians are almost purely English. Next to the English are the Germans, who are very numerous in the Middle states, particularly in Pennsylvania. Next to the Germans are the Dutch, who are most numerous in New-York. The French constitute nearly half the population of Louisiana. The Irish and Scotch are found in the Middle states, in the back parts of Virginia, and in all the principal cities of the Union. Very little is known about the Indians west of the Mississippi. The 4 principal tribes on the east of the Mississippi are the Creeks, Choctaws, Cherokees, and Chickasaws. These tribes live within the chartered limits of Georgia, Alabama, Mississippi and Tennessee.

Religion.] The principal religious denominations are Presbyterians and Congregationalists, who have together more than 2,500 congregations ; the Baptists, who have more than 2,000 congregations ; the Friends, who have more than 500 societies ; and the Episcopalians, who have about 300. The Methodists, also, are very numerous. The Baptists and Methodists are found in all parts of the United States ; the Congregationalists are almost wholly in New-England ; the Presbyterians are scattered over the Middle and Southern states ; the Friends are most numerous in Pennsylvania and the adjoining states, and the Episcopalians in New-York, Connecticut, Maryland and Virginia. German Lutherans, German Calvinists, and Moravians are also numerous in the Middle states.

Government.] The United States are a federal republic. Each of the states is independent, and has the exclusive control of all concerns merely local ; but the defence of the country, the regulation of commerce, and all the general interests of the confederacy are committed, by the constitution of the United States, to a general government. The legislative power is vested in a Congress, consisting of a Senate and House of Representatives. The Senate is composed of two members from each state, chosen by their Legislatures for 6 years. The Representatives are chosen by the people biennially, each state being entitled to a number proportioned to its free population, and in the slave-holding states every five slaves are allowed to count the same as three freemen. The President and Vice President are chosen for four years by electors appointed for the purpose, and each state appoints as many electors as the whole number of its Sena-

tors and Representatives. The salary of the President is \$25,000 per annum; of the Vice President, \$5,000. The principal officers in the executive department are the Secretary of State, the Secretary of the Treasury, the Secretary of War, the Secretary of the Navy, the Attorney General, and the Postmaster General.

Army and Navy.] The army, in 1820, consisted of 10,000 men, occupying numerous posts along the maritime and inland frontier. The navy at present (1822) consists of 7 ships of the line, 8 frigates and 23 smaller vessels; besides 4 ships of the line and 37 smaller vessels on the great lakes. The officers are 31 captains, 31 masters commandants, 196 lieutenants and 336 midshipmen.

Revenue.] The revenue of the United States, in 1819, was \$21,435,700. More than nine-tenths of the revenue have been usually derived from duties on imports. The sale of public lands for several years past has also yielded a considerable sum, and the amount from this source is rapidly increasing. The internal revenue and direct taxes on houses and lands yield very little, being only resorted to in cases of emergency.

Public Debt.] The public debt contracted in support of the war of independence, amounted in 1791, to \$75,463,167. During the long peace between 1783 and 1812 the country was prosperous, and the debt was gradually reduced to \$36,656,932. The war of 1812, '13, and '14, increased it again more than three-fold, and in 1816 it was \$123,016,375. It has since been greatly reduced, and in October 1st, 1820, was \$91,680,090.

Commerce and Manufactures.] The commerce of the United States consists principally in the exchange of agricultural produce for the manufactures of other parts of the world, and the productions of tropical climates. The whole value of the exports in 1821 was \$54,374,382, of which \$43,671,894 was domestic produce. The principal article is cotton; the quantity of which has been continually and rapidly increasing for more than 30 years. In 1790 the amount exported was only 100,000 pounds; in 1795, 1,300,000; in 1800, 17,789,803; in 1804, 35,034,175; and in 1817, 85,649,328 pounds, the value of which was \$22,628,000. Next in importance to cotton are wheat and flour, of which the amount exported in 1817 was 1,479,198 barrels, and the value \$18,432,000. Tobacco, lumber, rice, pot and pearl ashes, Indian corn, fish, beef and pork are also exported in large quantities. The principal articles imported may be arranged in the following order; manufactured goods, principally from Great Britain; sugar, rum, wine, molasses, brandy, coffee and teas.—The shipping belonging to the United States in 1818 was 1,165,185 tons. It is owned principally in New-England and New York. The states south of the Potomac own only one eighth part.—The annual value of the manufactures of the United States was estimated in 1810, at \$172,762,876.

NEW ENGLAND OR EASTERN STATES.

Situation and Extent.] New-England is bounded N. by Lower Canada; E. by New Brunswick; S.E. and S. by the Atlantic ocean; and W. by New-York. The area is estimated at 65,000 square miles.

Sea-coast.] The ocean washes New-England for about 700 miles. The coast is bold and abounds with fine harbors. Perhaps no country in the world has greater advantages for navigation. In this respect Maine is peculiarly distinguished.

Mountains.] There are several ranges of mountains which traverse the western part of New-England from north to south. 1. The *Green mountain range* commences in the N.W. part of Vermont, a little below the parallel of 45° N. lat. and running in a southerly direction through Vermont, Massachusetts and Connecticut, terminates at New-Haven on Long Island sound, in a noble bluff called West rock. It is nearly 300 miles in length, and the highest summits are about 4,000 feet above the level of the ocean. 2. The *Taghkanuc range* is a western branch of the Green mountain range. It leaves the principal chain a little below Middlebury, nearly opposite the southern extremity of lake Champlain, and running almost parallel with the Green mountain range, along the western boundaries of Vermont, Massachusetts and Connecticut, terminates also on Long Island sound, 20 miles S.W. of New-Haven. 3. The *White mountain range* commences in the northern part of New-Hampshire, and running in a southerly direction, forms the height of land between Connecticut and Merrimack rivers, after which it passes into Massachusetts, and a little below Northampton divides into two branches. The western branch, called the *Mount Tom range*, crosses Connecticut river, and running in a direction a little west of south, terminates at New-Haven, in a bluff called East rock, about two miles from the southern extremity of the Green mountain range. The eastern branch, called the *Lyme range*, runs directly south and terminates at Lyme, situated on the east bank of Connecticut river at its mouth. The highest summit of the White mountain range is more than 6,000 feet above the level of the ocean.

Productions.] Grass is undoubtedly the most valuable object of culture in New-England. One hundred acres of the best grazing-land under the direction of a skilful farmer, will yield as much net profit as 150 of the best arable land under the same direction. After grass, maize is the most valuable crop in this country. It is extensively the food of man, being palatable, wholesome, and capable of being used agreeably in more modes of cookery than any other grain. It is also the best food for cattle and swine. Wheat grows well wherever the ground is sufficiently dry, in all the countries westward of the Lyme and White mountain ranges; and in many places eastward of that limit. Ap-

ples abound in New-England, more perhaps than in any other country, and cider is the common drink of the inhabitants of every class. Rye, barley, oats, potatoes, beans, peas, onions and other garden vegetables are also among the cultivated productions.

The noblest production of the forest is the white pine: It grows to six feet in diameter, and its height, in some instances, exceeds 260 feet. Its stem is often exactly straight, gently tapering, and without a limb to the height of more than 100 feet. This tree is of vast importance for building. The white oak of New-England, is a noble and most useful tree, but is less durable than the English oak. The chesnut is generally used for fencing, and is very valuable for building. The maple is a noble tree, and the sugar made from its sap is of an excellent quality.

Education.] Common schools are universally established, and a person of mature age, who cannot both read and write, is rarely to be found. Academies are also numerous; and there are nine colleges in which the Greek and Latin languages, mathematics, natural philosophy, chemistry, logic, rhetoric and all the higher branches are taught by recitations and lectures. The term of study in all the colleges is four years.

Divisions.] New-England is divided into six states, viz. 1. Maine. 2. New-Hampshire. 3. Vermont. 4. Massachusetts. 5. Rhode Island. 6. Connecticut.

MAINE.

Situation and Extent.] Maine is bounded N.W. and N. by Lower Canada; E. by New-Brunswick; S. by the Atlantic ocean, and W. by New-Hampshire. It extends from 43° 5' to 48° N. lat. and from 66° 49' to 70° 55' W. lon. The area is estimated at 31,750 square miles.

Divisions.] The state is divided into nine counties and 246 towns.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
1. York,	23	41,877	46,283	York.
2. Cumberland,	25	42,831	49,445	PORTLAND.
3. Lincoln,	34	42,992	53,189	Wiscasset.
4. Hancock,	31	30,031	31,290	Castine.
5. Washington,	13	7,870	12,744	Machias.
6. Oxford,	31	17,630	27,114	Paris.
7. Kennebeck,	33	32,564	42,623	Hallowell.
8. Somerset,	31	12,910	21,787	Norrigewock.
9. Penobscot,	25	*	13,870	Bangor.
Total,	246	228,705	292,335	

* In 1810 Penobscot county was included in Hancock.

The five first named counties border on the sea coast from S. W. to N. E. ; the rest lie behind them in the interior in the same direction.

Bays.] The coast of this state is very bold, and indented by numerous spacious bays, the principal of which, beginning in the west, are, *Casco bay*, which sets up between cape Elizabeth and cape Small Point ; *Penobscot bay*, which receives the river of the same name, and contains numerous islands and many fine harbors ; *Frenchman's bay*, still farther east ; and *Passamaquoddy bay*, which receives St. Croix river, and communicates with the bay of Fundy between West Quoddy head and the coast of New-Brunswick.

Lakes.] *Umbagog lake* is principally in this state, but partly in New Hampshire. It is 18 miles long and in some places 10 broad. *Moosehead lake*, lying N. E. of the Umbagog, is the largest in New-England. It is said to be 60 miles long. *Chesuncook lake*, 10 or 15 miles N. E. of the Moosehead, is a large body of water. There are several other large lakes, still further north ; but very little is known about them, that part of the state not having as yet been explored. *Sebago pond* is a large body of water, 18 miles N. W. of Portland. Smaller lakes and ponds abound in every part of the state.

Rivers.] The following are the principal rivers, beginning in the west. 1. The *Saco* rises among the White mountains in New Hampshire, and running S. E. into Maine, falls into the sea at Saco. It has falls 6 miles from its mouth, which completely obstruct the navigation. 2. The *Androscoggin* forms the outlet of Umbagog lake. The first part of its course is in New-Hampshire. After entering Maine it runs at first in an easterly and afterwards in a southerly direction, and joins the Kennebeck, after a course of about 150 miles. It has falls near its mouth. 3. The *Kennebeck* is formed by the union of two principal branches. The eastern branch is the outlet of Moosehead lake ; the western, called Dead river, rises in the highlands which separate Maine from Canada, and unites with the eastern branch about 20 miles below Moosehead lake. After the junction, the river flows south to the Atlantic. It is navigable for ships 12 miles, to Bath ; for sloops 45 miles, to Augusta, at the head of the tide ; and for boats 60 miles, to Waterville. At Waterville the navigation is interrupted by Teconic falls, which afford numerous sites for mills. 4. The *Penobscot*, the largest river in Maine, is formed by two principal branches. The western and longest branch rises west of Moosehead lake, in the highlands which separate Maine from Canada, and flowing east through Chesuncook lake, unites with the eastern branch about 60 miles north of Bangor. After the junction, the river flows south, and falls into the head of Penobscot bay. It is navigable for sea vessels to Bangor, 50 miles from the entrance of the bay. 5. The *St. Croix* river, called also the *Schoodic*, forms the boundary between the United States and New Brunswick from its mouth to its source. It falls into Passamaquoddy bay and is navigable for sea vessels to the falls,

at Calais, 30 miles from its mouth. 6. The *St. John* river rises a little north of Chesuncook lake, and after passing through three great lakes, runs in a northeasterly course for some distance, and then, turning to the southeast, enters New-Brunswick, and discharges itself into the bay of Fundy. With the exception of two places, where there are short portages, it is navigable for boats from its mouth to its source, a distance of more than 300 miles.

Face of the Country.] An extensive district in the northwestern and central parts of the state lying around the head waters of the Kennebeck, Penobscot and *St. John* is mountainous, and some of the summits are very lofty, particularly Katahdin, situated 80 miles north of Bangor, and supposed by some to be the highest land in the United States. The rest of the state is generally hilly, and the hills diminish in height on every side as you recede from the mountains. In the southwestern parts are extensive plains.

Climate.] In all parts of Maine the air is pure and salubrious. The summers in most parts of the state are favorable to the growth of all the vegetable productions of the northern states. In some parts, however, Indian corn, and the plants of a more tender kind, which require a great and uniform degree of heat, are frequently injured, and sometimes destroyed by untimely frosts. In the winter the snow covers the ground to a considerable depth and continues, in some parts, two months, and in others four and even five. In the interior, the temperature, both in summer and winter, is much more uniform than on the sea coast.

Soil and Productions.] The southwestern part of the state, and the tract of country along the sea coast from 10 to 20 miles wide, is generally poor, though in some places tolerably fertile. The land on the Kennebeck and between that river and the Penobscot is excellent. East of the Penobscot it is less productive. The mountainous tract in the northwest has a poor soil. The lands on *St. John's* river and its numerous branches are said to be very fertile, but this part of the state is not yet settled. The principal productions are grass, Indian corn, wheat, barley, rye, flax, &c.

Chief Towns.] *Portland*, the capital, is situated on a peninsula in Casco bay 118 miles N. N. E. of Boston. The harbor is safe, easy of access, and seldom frozen over, but is not large, and requires considerable fortifications for its protection. The town is by far the most considerable in the state in population, wealth and commerce, and is connected with an extensive and growing back country. In 1815, it was the eighth town in the United states in amount of shipping, the number of tons being 30,417. The population, in 1820, was 8,581.

Brunswick, the seat of Bowdoin college, is 30 miles north-east of Portland, on the Androscoggin, at the falls, which furnish here many valuable seats for mills and manufactories. The population of the town in 1820 was 2,931.

Bath is on the western side of Kennebeck river, at the head of winter navigation, 12 miles from the sea, and 35 miles N. E. of

Portland. More shipping is owned here than in any other town in Maine except Portland; the number of tons in 1815 being 20,627. Population, in 1820, 3,026. *Wiscasset* is 14 miles N. E. of Bath. The harbor is safe, capacious, easy of access, and open at all seasons of the year. A large amount of shipping is owned here. The number of tons, in 1815, was 18,429. Population, in 1820, 2,131. *Waldoborough*, 22 miles east of Wiscasset, has a large amount of shipping, employed principally in the coasting trade. Population, in 1820, 2,448.

Castine is important principally as a military position. It is situated on a promontory, nearly at the head of the east side of Penobscot bay. The harbor is excellent for any number of ships of the largest size, and is accessible at all seasons of the year. The town has great strength from its natural situation. From the narrowness of the isthmus which connects it with the main, it could be insulated without much labor or expense; and this mode of defence, in addition to strong batteries, would enable it to resist any force which would probably be brought against it. An enemy in possession of Castine and having the control on the water, commands the whole country between the Penobscot and the St. Croix. This place was taken by the British during the late war, but was restored on the return of peace. Population, in 1820, 975.

Bangor is a flourishing town, 35 miles north of Castine, on the west side of the Penobscot, at the head of navigation. Population, in 1820, 1,221. *Machias*, situated on a bay of the same name, 40 miles W. S. W. of Eastport, is a thriving town, and carries on considerable trade, principally in lumber. There are 26 saw-mills within the town, which cut on an average, upwards of 10,000,000, feet of boards in a year. *Lubec* is situated at the S. E. extremity of the state, on a peninsula, on the west side of Passamaquoddy bay, at the entrance. It is a new town, commenced in 1815, and is well situated for commerce. It has an excellent harbor and considerable trade. Population, in 1820, 1430. *Eastport*, on Moose island, in Passamaquoddy bay, 4 miles N. N. W. of Lubec, is favorably situated for commerce. Population, in 1820, 1,937.

York is an ancient town, on the coast, near the southwest extremity of the state. Population, in 1820, 3,224. *Saco* at the mouth of the river of the same name, is well situated for trade and manufactures. The principal village is at the falls, which furnish numerous sites for mills and manufacturing establishments. Population, in 1820, 2,532.

Hallowell is a flourishing town on Kennebeck river, 40 miles from its mouth, at the head of the tide, in the midst of a fertile country. The river is navigable to this place for vessels of 150 tons. Within a few years the town has increased very rapidly, and is now one of the most wealthy and flourishing places in Maine. Population, in 1820, 2,919. *Augusta*, on the Kennebeck, 2 miles above Hallowell, has 2,457 inhabitants. Vessels of 100 tons

ascend to this place. The most flourishing towns on the Kennebeck above Augusta, are *Vassalborough*, *Waterville* and *Norrigewock*.

Population.] The population in 1790 was 96,540; in 1800, 151,719; in 1810, 226,705; and in 1820, 298,335, having more than trebled in 30 years. The most populous parts of the state are on the sea-coast and the Kennebeck river. The northern half of the state is as yet uninhabited, and almost unexplored. There is so much vacant, fertile land that the population will probably increase rapidly for many years.

Education.] Bowdoin college, in Brunswick, was incorporated in 1794. In 1822 it had a President and 4 professors, including 2 medical professors; 2 tutors; 167 students, including 49 medical students; a complete philosophical apparatus, and a library of about 5,000 volumes. The buildings are pleasantly situated on an elevated plain, commanding a view of the Androscoggin and the adjacent country. The college was endowed by the legislature of Massachusetts with five townships of land, and the sum of 3,000 dollars annually, in money. Since the separation of Maine from Massachusetts the legislature of the new state has continued the annual grant. The principal private benefactor of the college was the late Hon. James Bowdoin, whose donations amounted to 10,000 dollars.

The *Maine charity school* at Bangor was incorporated in 1814. Its object is to educate young men for the ministry in a shorter time than is usual at other seminaries. The course of study is completed in four years. The qualifications for admission are a knowledge of the English and Latin grammar, and some acquaintance with the Latin classics. The founders of the institution propose by an abridgement of the term of study to furnish religious instructors, at a moderate expense, sufficiently qualified for the services required in new settlements. The school is under the direction of two professors and a preceptor, and in 1819 had 19 students.

A *Literary and Theological institution*, under the direction of members of the Baptist denomination, has been established at Waterville, on the Kennebeck. It was opened in 1818 with 12 or 15 theological students. Common schools are supported by law in every town in the state.

Religion.] The Congregationalists and Baptists are the prevailing denominations. They have each more than 100 churches.

Government.] Maine was formerly united with Massachusetts under the same government, but in 1820, by a mutual agreement, the union was amicably dissolved, and Maine, after adopting a republican constitution, was erected into an independent state and admitted into the Union.

Commerce.] A large portion of the state is yet covered with forests, and hence lumber at present is the great article of export. It is brought down all the principal rivers in large quantities. The other articles of export are fish, potash, beef and

port. Maine is finely situated for commerce. It has an extensive sea-coast abounding with good harbors, and the numerous rivers which intersect it afford an easy communication with the interior. Its supply of lumber, and of materials for potash, is immense, and its resources in the fisheries are almost inexhaustible. The people are very generally inclined to commercial pursuits, and perhaps no part of the United States suffers so much from restrictions on commerce. In amount of shipping it is the fourth state in the Union. The nearest market for the southwestern section of the state is Portland; for the country on the Kennebeck, Hallowell; for the country on the Penobscot, Bangor. The natural market for the northern half of the state, which is yet unsettled, will be Quebec in Lower Canada, and Fredericton in New-Brunswick.

Islands.] The coast abounds with islands and peninsulas. The largest is *Mount Desert* island on the west side of *Frenchman's bay*. It is 15 miles long and 12 broad. *Deer-isle* is on the east side of Penobscot bay, about 8 miles S. E. of Castine.

NEW-HAMPSHIRE.

Situation and Extent.] New-Hampshire is bounded N. by Lower Canada; E. by Maine; S. E. by the Atlantic; S. by Massachusetts; and W. by the western bank of Connecticut river, which separates it from Vermont. The eastern boundary is Piscataqua river, and a line drawn N. 2° W. from the source of that river, to the highlands which divide the waters falling into the St. Lawrence from those falling into the Atlantic. The state extends from 42° 41' to 45° 11' N. lat. and from 70° 40' to 72° 28' W. lon. It is 170 miles long from N. to S. and 90 broad at the southern extremity. The area is estimated at 9,491 square miles or 6,074,240 acres.

Divisions.] New-Hampshire is divided into six counties and 204 towns.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Rockingham,	46	50,175	55,246	Portsmouth, CONCORD,
Strafford,	32	41,595	51,117	Dover.
Hillsborough,	40	49,249	53,884	Amherst.
Cheshire,	37	40,988	45,376	Keene.
Grafton,	35	28,462	32,989	Hanover.
Cook,	14	3,991	5,549	Lancaster.
Total,	204	214,460	244,161	

Lakes.] *Winnipiseogee* or *Wentworth* lake, near the centre of the state, is a beautiful body of water, 22 miles long, and from 3 to 12 miles broad. It contains a number of islands. The sur-

open a water communication between Portsmouth and the centre of the state.

Various routes have been proposed for a navigable communication from the Merrimack to the Connecticut. One plan is to unite Baker's river with the Connecticut; another, to connect the Contoocook with Sunapee lake; and a third, to connect the Contoocook with the Ashuelot.

Chief Towns.] *Portsmouth*, the largest town in the state, stands on the south side of Piscataqua river, about two miles from the sea. The harbor is one of the best in the United States. It is landlocked on every side, and perfectly safe, of sufficient depth for the largest vessels at all times of the tide, and, owing to the rapidity of the current, is never frozen. The main entrance is about a mile wide, and is well defended by two forts. There is an island in the inner harbor, opposite the town, on which is a United States navy yard, containing good timber docks, and all the conveniences for building ships of the largest class. Several ships of the line have been built here. Portsmouth has considerable trade. In 1815, it was the ninth town in the United States in amount of shipping, the number of tons being 30,411. The population in 1820 was 7,327.

Concord, the capital of the state, is a flourishing town on the Merrimack, at the head of navigation, and well situated for trade. Much of the produce of the Upper country is brought here, and passes down the Merrimack river and Middlesex canal to Boston. Among the public buildings are a handsome state-house and state-prison, both of stone. Population, in 1820, 2,838.

Dover is 12 miles N. W. of Portsmouth. The village is at the head of the tide on Cocheco river, 4 miles above its junction with the Piscataqua. It has various mills and manufacturing establishments, and daily communication with Portsmouth by a packet. Population, in 1820, 2871. *Exeter* is pleasantly situated at the head of the tide on Exeter river, a branch of the Piscataqua, 15 miles S. W. of Portsmouth, and about the same distance N. W. of Newburyport in Massachusetts. It has numerous manufacturing establishments. Among the public buildings are a court-house and an academy. Population, in 1820, 2,114.

Amherst is a mile west of the Merrimack, near the southern boundary of the state, 30 miles south of Concord. *Plymouth* is on the Merrimack, at the mouth of Baker's river, 43 miles north of Concord. *Keene* is a pleasant town in the southwestern part of the state on the Ashuelot, 55 miles S. W. of Concord.

The principal towns on Connecticut river are *Walpole*, 13 miles N. W. of Keene; *Charlestown*, 12 miles N. of Walpole; *Hanover*, the seat of Dartmouth college; *Haverhill*, 27 miles N. of Hanover; and *Bath*, adjoining Haverhill, at the head of boat navigation.

Education.] *Dartmouth college*, at Hanover, was founded in 1769, and received its name from the Earl of Dartmouth, one of its earliest and most generous benefactors. In 1821 it had a president, 8 professors, including 3 medical professors; 2 tutors; and

230 students, including 65 medical students. It has a good chemical apparatus, a philosophical apparatus, and a valuable anatomical museum. The college library contains about 4,000 volumes, and there are 2 libraries belonging to societies of students, each of which contains nearly 2,000 volumes. The permanent funds of the college yield about \$2,000 a year. This, with the tuition, makes an annual income of about \$6,000.

Phillips Exeter Academy, at Exeter, was founded by the Hon. John Phillips L. L. D. in 1781. It is one of the oldest and most flourishing academies in New-England. It has funds amounting to about \$30,000; a well selected library of 700 volumes, and a handsome philosophical apparatus. Its officers are a principal, a professor of mathematics and natural philosophy, and an assistant. The funds are appropriated in part to the support of indigent students.

Union Academy, at Plainfield on Connecticut river, 42 miles N. W. of Concord, was established in 1813. It is handsomely endowed, and is intended for the gratuitous education of indigent young men preparing for the ministry, in the studies preparatory to a collegial course.

Population.] The population in 1790 was 141,885; in 1800, 185,858; in 1810, 214,460; and in 1820, 244,161; having increased 74 per cent. in 30 years. The great mass of the population is in the southern half of the state. North of Winnipiseogee lake there are very few inhabitants, except on Connecticut river.

Religion.] The Baptists and Congregationalists are the prevailing denominations. In 1817 the number of ordained ministers was estimated at 222, of whom 107 were Baptists, 100 Congregationalists, and 15 of other denominations.

Government.] The legislative power is vested in a General court, consisting of a Senate and House of Representatives. The Senate consists of 13 members chosen annually by districts. The Representatives are chosen by the different towns; each town having 150 rateable polls sends one Representative, and every addition of 300 polls entitles it to another. The executive power is vested in a Governor, who is chosen annually by general ballot, and a council consisting of 5 members.

Manufactures.] Few countries in the world are better furnished with mill-streams, and mill-seats, than New-Hampshire, and manufactories have increased very rapidly within a few years. There are now more than 30 cotton and woollen factories, many of them on an extensive scale. A glass manufactory has been recently established at Keene, and there are two establishments for the manufacture of iron at Franconia, on a branch of the Lower Ammonoosuck, 14 miles N. E. of Haverhill. The mine from which the iron is obtained is considered the richest in the United States, and is said to be inexhaustible, and there is a large bed of coal within a short distance of the works.

Commerce.] The principal exports are lumber, pot and pearl ashes, fish, beef, live cattle, pork and flax seed. The market for the northern part of the state is Portland; for the southeastern,

Portsmouth and Newburyport; for the country on the Merrimack, Boston; for the country on the Connecticut, Hartford and Boston.

Curiosity.] *Bellows falls*, in Connecticut river, at Walpole, are regarded as a curiosity. The whole descent of the river in the space of 100 rods is 44 feet. There are several pitches, one above another, at the highest of which a large rock divides the stream into two channels, each about 90 feet wide. When the water is low, the eastern channel is dry, being crossed by a bar of solid rock; and the whole stream falls into the western channel, where it is contracted to the breadth of 16 feet, and flows with astonishing force and rapidity. In 1792, at a time of severe drought, the water of the river, it is said, passed within a space 12 feet wide and $2\frac{1}{2}$ feet deep. A bridge is built over these falls, under which the highest floods pass without detriment.

Islands.] The *isles of Shoals*, 8 in number, lie 11 miles S. E. of Portsmouth. A part of them belong to Maine, and a part to New-Hampshire. They consist of barren rocks and are inhabited by about 100 souls, who subsist by fishing.

VERMONT.

Situation and Extent.] Vermont is bounded N. by Lower Canada; E. by New-Hampshire; S. by Massachusetts; and W. by New-York, from which it is separated in part by lake Champlain. The northern boundary is the parallel of 45° N. lat. The state extends from $42^{\circ} 44'$ to 45° N. lat. and from $71^{\circ} 38'$ to $73^{\circ} 26'$ W. lon. It is 157 miles long from N. to S. 90 miles broad on the northern boundary, and 40 on the southern. The area is estimated at 10,212 square miles.

Divisions.] The state is divided into 13 counties.

Counties.	Pop. in 1810.	Pop. in 1820.	Chief Towns.
1. Windham,	26,760	28,457	Brattleborough, Newfane.
2. Windsor,	34,877	38,233	Windsor, Woodstock.
3. Orange,	22,085	24,681	Chelsea, Newbury.
4. Caledonia,	14,966	16,669	Danville, Peacham.
5. Essex,	3,087	3,284	Guildhall.
6. Grand isle,	3,445	3,527	North Hero.
7. Franklin,	16,427	17,192	St. Albans.
8. Chittenden,	14,684	16,055	Burlington.
9. Addison,	19,293	20,469	Middlebury, Vergennes.
10. Rutland,	29,487	29,983	Rutland.
11. Bennington,	15,393	16,125	Bennington, Manchester.
12. Washington,	10,372	14,113	MONTPELIER.
13. Orleans,	5,838	6,976	Irasburg.
Total,	217,918	235,764	

The five first named counties lie from S. to N. on Connecticut river, and the five next from N. to S. on lake Champlain. Bennington is in the S. W. corner of the state, Washington in the centre, and Orleans on the northern boundary.

Lakes.] Lake Memphremagog, on the northern boundary, is partly in this state, but principally in Canada. It is 30 miles long and discharges itself through St. Francis river into the St. Lawrence. Lake Champlain, on the western boundary, is 128 miles long, from Whitehall, at its southern extremity, to its termination 24 miles north of the Canada line, and from half a mile to 16 miles broad. It discharges itself at its northern extremity through the river Sorelle into the St. Lawrence. There are several large islands in the northern part of the lake, the principal of which are North and South Hero. A battle was fought on this lake on the 11th of September 1814, in which the American fleet, under Commodore Macdonough, gained a complete victory over the British.

Rivers.] The Connecticut forms the eastern boundary. The principal tributaries of the Connecticut, beginning in the south, are, 1. *West river*, which joins it about 10 miles from the southern boundary; 2. *Queechy*, which discharges itself 10 miles above Windsor; 3. *White river*, which discharges itself 5 miles above the Queechy, and 4. The *Pasumpsic*, which rises a little S. E. of lake Memphremagog, and running south, discharges itself 15 or 20 miles above Newbury.

The principal rivers which fall into lake Champlain, beginning in the north, are, 1. *Missisque river*, which rises to the S. W. of lake Memphremagog, and runs into Missisque bay in the N. E. part of the lake. 2. *La Moil*, which rises to the south of lake Memphremagog, and running west falls into the lake 10 miles north of Burlington. 3. *Onion river*, which rises still farther south, and running nearly parallel with La Moil, passes by Montpelier, and discharges itself into the lake 4 miles N. W. of Burlington village. 4. *Otter creek*, which rises in the southwestern part of the state, and running in a direction west of north, passes by Rutland, Middlebury and Vergennes, and discharges itself about 20 miles south of Burlington.—None of the rivers of Vermont are navigable, except for a few miles from their mouths; but they abound with valuable mill seats, especially Otter creek.

Mountains.] The *Green mountains*, from which the state derives its name, come from Massachusetts, and run from south to north along the east side of Bennington, Rutland and Addison counties. In Addison county they divide; the western and principal chain continues a northerly course, and terminates near the northern boundary of the state in a succession of small hills; while the *height of land*, as it is called, strikes off to the north-east, dividing the waters which fall into the Connecticut from those which fall into lake Memphremagog and lake Champlain. The western range presents much the loftiest summits, but has openings which afford a passage for Onion and La Moil rivers.

The highest summits of the Green mountains are *Killington peak*, a few miles east of Rutland; *Camel's Rump*, about half way between Montpelier and Burlington, and *Manxfield mountain*, a few miles farther north, all of which are more than 3,500 feet above the level of the sea. *Ascutney*, a single mountain 5 miles S. S. W. of Windsor, is 3,320 feet above the sea.

Face of the Country, Soil, &c.] The country on each side of the Green mountains consists of hills, vallies and plains. The plains are of moderate extent, the surface being almost everywhere undulating. The soil is generally rich, and yields abundantly wheat, barley, rye, grass, Indian corn, oats, peas, flax, &c. Much of the land on the Green mountains in the northern part of the state is excellent for grazing.

Chief Towns.] MONTPELIER, the capital, is on Onion river, near the centre of the state, at the point of intersection of several principal roads. Population, in 1810, 1,877.—*Newbury* is a pleasant town on Connecticut river, opposite Haverhill in New-Hampshire, and 34 miles E. S. E. of Montpelier.

Windsor is a beautiful town on Connecticut river, 60 miles south of Montpelier. It is a place of considerable business and contains the state prison. Population, in 1810, 2,757. *Brattleborough* is on Connecticut river, 43 miles below Windsor, near the southeast corner of the state. *Bennington*, near the S. W. corner of the state, is one of the oldest towns in Vermont, and is famous for the battle of August 1777, in which the American militia, under General Stark, defeated the British. Population, in 1810, 2,524. *Rutland* is on Otter creek, 57 miles north of Bennington, and 45 west of Windsor.

Middlebury, the seat of Middlebury college, is pleasantly situated on Otter creek, at the falls, 20 miles from the mouth of the river. In the vicinity of the falls there are numerous mills and manufacturing establishments. An extensive quarry of fine marble was discovered in 1804 on the bank of the creek, near the centre of the village. It is now wrought into tomb-stones, mantle-pieces, side boards, &c. and transported to various parts of the country to the amount of 7,000 or 8,000 dollars annually. Population, in 1810, 2,138. *Vergennes* is at the head of navigation on Otter creek, 11 miles below Middlebury.

Burlington, the seat of the University of Vermont, is delightfully situated, on a bay of the same name in Lake Champlain, near the mouth of Onion river. The village occupies the side of a hill, ascending nearly a mile from the bay, and is one of the handsomest in the state. Within the limits of the township, a mile N. E. of the village, are the falls of Onion river, around which are several valuable mills and manufacturing establishments. About 20 vessels navigate lake Champlain, most of which are owned in this place. Population, in 1810, 1,690. *St. Albans* is a flourishing town on lake Champlain, near the northwest corner of the state.

Education.] There are two colleges, one at Middlebury and the other at Burlington. *Middlebury college* was incorporated in

1800, and has been supported entirely by private bounty. In 1821 it had a president, 4 professors, 2 tutors, and 92 students. It has a library of more than 1,200 volumes and a valuable philosophical apparatus.—The *University of Vermont*, at Burlington, was incorporated in 1791, and has been liberally patronized by the state. The funds consist principally of lands, amounting to about 40,000 acres, and yield at present an income of about 1,200 dollars. The number of students in 1818 was 28.

The *American literary, scientific and military academy*, was established in 1820 at Norwich on Connecticut river, 21 miles north of Windsor. It is under the superintendence of Capt. Alden Partridge, and has 6 professors, and 117 students or cadets. The students are required to wear a uniform dress, and to go through a regular system of military exercises, besides the usual course of studies pursued at other literary institutions.

Population and Religion.] The population in 1790 was 35,589; in 1800, 154,465; in 1810, 217,895; and in 1820, 235,764; having nearly trebled in 30 years. About half the population in 1820 was in the four southern counties; the northern part of the state is thinly settled. Vermont has been settled entirely from the other states of New-England, and the inhabitants have of course the New-England character. The Congregationalists and Baptists are the prevailing denominations of Christians.

Government.] The legislative power is vested in a house of representatives, chosen annually by the different towns, each town being entitled to one representative. The executive power is vested in a governor, lieutenant governor and twelve counselors, chosen annually by general ballot. The constitution provides also for the election of a council of censors, to consist of 13 persons, chosen by the people once in seven years. They hold their office for the space of one year, and it is their business to inquire whether the constitution has been preserved inviolate, during the seven years immediately preceding their appointment, and whether the legislative and executive branches of the government have performed their duty. Every person, of 21 years of age, having resided in the state one year, is entitled to vote at all elections of state officers.

Commerce.] The principal exports are pot and pearl ashes, lumber, beef, pork, butter, cheese, flax, &c. The markets to which the people of this state principally resort are Quebec, Montreal, Troy, Albany, New-York, Hartford and Boston. To Quebec they send large quantities of lumber by lake Champlain and the river Sorelle. With Montreal they trade for furs, peltry, and some foreign commodities. On the western side of the mountains they derive most of their foreign goods from Troy, Albany and New-York. Fatted cattle they drive to New-York and Boston. Horses they sell at New-Haven and Hartford for the West-Indian market. On Connecticut river, lumber and other produce is transported to Hartford; and foreign commodities of various kinds are taken in return. Most parts of the state, also, carry on considerable trade with Boston.

MASSACHUSETTS.

Situation and Extent.] Massachusetts is bounded N. by Vermont and New-Hampshire; E. by the Atlantic; S. by Rhode-Island and Connecticut; and W. by New-York. Its length on the northern line is 130 miles; its breadth at the western extremity is 50 miles. It extends from $41^{\circ} 23'$ to $43^{\circ} 52'$ N. lat. and from $69^{\circ} 30'$ to $73^{\circ} 10'$ W. lon. The area is estimated at 7,250 square miles.

Divisions.] The state is divided into 14 counties and 300 towns.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
1. Essex,	26	71,888	74,655	Salem, Newburyport.
2. Middlesex,	44	52,789	61,472	Charlestown, Cambridge.
3. Suffolk,	2	31,381	43,940	Boston.
4. Norfolk,	22	31,245	36,471	Dedham.
5. Plymouth,	12	35,169	38,136	Plymouth.
6. Barnstable,	14	23,211	24,026	Barnstable.
7. Bristol,	19	37,168	40,908	Taunton.
8. Worcester,	54	64,910	73,625	Worcester.
9. Franklin,	25	27,301	29,268	Greenfield.
10. Hampshire,	22	24,553	26,487	Northampton.
11. Hampden,	18	24,421	28,021	Springfield.
12. Berkshire,	32	35,907	35,720	Lenox.
13. Duke's,	3	3,290	3,292	Edgarton.
14. Nantucket,	1	6,807	7,266	Nantucket.

Total, 300 472,040 523,287

The seven first named counties border on the sea-coast. Worcester county is in the centre of the state and extends through its whole breadth from Rhode-Island to New-Hampshire. Franklin, Hampshire and Hampden are on Connecticut river. Berkshire is the most western county, and borders on Vermont, New-York and Connecticut. Duke's county embraces Martha's Vineyard and the Elizabeth islands. Nantucket consists of the island of Nantucket.

Peninsula.] The county of Barnstable is a peninsula, commonly called the *peninsula of cape Cod*. Its shape is that of a man's arm bent inwards, both at the elbow and wrist. A great part of this peninsula is sandy and barren, and in many places, wholly destitute of vegetation; yet it is populous. The inhabitants obtain their support almost entirely from the ocean; the men being constantly employed at sea; and the boys, at a very early age, are put on board the fishing boats. In consequence of the violent east winds, it is supposed that the cape is gradually wearing away.

Bays and Capes.] *Massachusetts bay* is a large bay communicating with the Atlantic between cape Ann on the north and cape Cod on the south. It includes several smaller bays, among which are *Boston bay*, which sets up between Nahant point on the north, and point Alderton on the south; *Plymouth bay*, and *Barnstable bay*. *Buzzard's bay* is on the S. W. side of the peninsula of cape Cod, and separated from Barnstable bay by a narrow isthmus. The most noted capes, besides cape Ann and cape Cod, are *cape Malabar*, at the southeast extremity of the peninsula of cape Cod; *Sandy point*, at the northern extremity of the island of Nantucket; and *Gayhead*, the western point of Martha's Vineyard.

Face of the Country.] The surface is generally undulating, except in the southeastern counties, where it is level. The western part of the state is traversed from north to south by several ranges of mountains. The *White mountain range* comes from New-Hampshire, and running on the east side of Connecticut river, divides a little below Northampton into the Mount Tom range and Lyme range. The *Green mountain range* comes from Vermont, and occupies a large part of the county of Berkshire. The *Taghkannuc range* runs along the western boundary of the state. The highest summits in the Taghkannuc range are *Saddle mountain*, which rises near the N. W. corner of the state to the height of about 4,000 feet above the level of the sea; and *Taghkannuc*, which is near the S.W. corner of the state, on the borders of Connecticut and New-York, and is about 3,000 feet high. The principal summits in the Mount Tom range are Mount Tom and Mount Holyoke, both of which rise in the neighborhood of Northampton to the height of more than 1,200 feet above the level of the sea. *Wachusett* is a single mountain in Princeton, 15 miles north of Worcester. The height is variously estimated from 2,000 to 3,000 feet.

Soil and Productions.] On the sea coast the land is poor, particularly in the southeastern counties which are sandy. The rest of the state has generally a good soil, producing grass, Indian corn, rye, wheat, oats and potatoes, in abundance. In no state in the Union have greater advances been made in agriculture than in Massachusetts. The towns around Boston are literally gardens from which the capital is supplied with the finest fruits and vegetables. Agricultural societies have recently been formed in various parts of the state, which promise to be of great benefit by encouraging the importation of valuable breeds of animals, and promoting every species of agricultural improvement.

Minerals.] Iron ore is found in considerable quantities in Bristol and Plymouth counties. Quarries of marble have been opened in Stockbridge, and in other towns of Berkshire county. Great quantities of beautiful granite are found in Chelmsford and Tyngsborough, near the banks of the Middlesex canal; it is much used for building in Boston and other places.

Rivers.] *Connecticut river* traverses the western part of the state from north to south and passes into Connecticut. The *Merrimack* comes from New-Hampshire, and running in a north-

easterly direction about 50 miles, falls into the ocean below Newburyport. *Ipswich* river is a small stream, which falls into the ocean 9 miles south of the Merrimack. *Charles* river falls into Boston harbor between Boston and Charlestown, after a northeasterly course of 40 miles. It is navigable to Watertown, 7 miles. *Neponset* river falls into Boston harbor on the south side of the town. It is navigable for vessels of 150 tons to Milton, 4 miles. *Taunton* river rises in Plymouth county, and after a S. W. course of 50 miles falls into Narragansett bay. It is navigable for small vessels to Taunton, 20 miles.

The principal tributaries of the Connecticut from this state are, *Westfield* river, which rises in the northern part of Berkshire county, and running in a S. E. direction joins it at West Springfield near the southern boundary; *Deerfield* river, which rises in Bennington county in Vermont, and running S. E. empties itself between Deerfield and Greenfield near the northern boundary; *Millers* river, which empties itself from the east side, above Deerfield river; and the *Chickapee*, which rises in Worcester county, and running S. W. empties itself at Springfield, above the mouth of Westfield river.

The principal tributaries of the Merrimack from this state are, the *Nashua*, which rises in Worcester county and running N. E. into New-Hampshire, empties itself near the southern boundary of that state; and *Concord* river, which is formed by the union of two small rivers at Concord and running N. E. empties itself 15 or 20 miles below the Nashua.

The *Hooestennuc* rises in the northern part of Berkshire county and flows south into Connecticut, draining the waters of the valley included between the Green mountain range on the east and the Taghkannuc range on the west.

Canals.] *Middlesex* canal is wholly within the county of Middlesex. It connects Boston harbor with Merrimack river. It is supplied with water by Concord river which it crosses on its surface. From that river, southward, it descends 107 feet by 13 locks, to the tide water of Boston harbor; and from that river, northward, it descends 21 feet by 3 locks, to the level of Merrimack river. The canal is 31 miles long, 24 feet wide on the surface, and 4 feet deep. It was commenced in 1793 and completed in 1804 at an expense of more than \$700,000. By this canal and Merrimack river an easy communication is opened between Boston and the interior of New-Hampshire.

There is a canal around the falls in Connecticut river at South Hadley. In one place it is cut through the solid rock more than 40 feet deep and 300 feet in length. There are other falls in the Connecticut above and below South Hadley, which have been overcome by canals, dams and other improvements, so that the river is now navigable for boats through the whole of its course in this state, and as high as Bath in New-Hampshire.

A canal for sloops from Buzzard's bay to Barnstable bay through the isthmus of cape Cod has long been in contemplation, and in 1818 a company was incorporated to carry the plan into

execution. The great object is to shorten the voyage between Boston and the southern ports, and to avoid the dangerous navigation around cape Cod, which has heretofore occasioned the destruction of much property and many lives.

Chief Towns.] Boston, the capital of the state, and the largest town in New-England, is pleasantly situated at the bottom of Massachusetts bay, on a peninsula of an uneven surface, 2 miles long, and in the widest part about one mile wide. The harbor is one of the best in the United States. It has sufficient depth of water for the largest vessels at all times of tide, and is accessible at all seasons of the year. It is safe from every wind, and so capacious that it will allow 500 vessels to ride at anchor, while the entrance is so narrow as scarcely to admit two ships abreast. The entrance is well defended by Fort Independence and Fort Warren.

There are four bridges connecting Boston with the adjacent towns. Charles river bridge, which connects it with Charlestown on the north, is 1503 feet long, 42 broad, and stands on 75 piers. West Boston bridge, connecting it with Cambridgeport on the west, is 3,483 feet long, and stands on 130 piers. Cragie's bridge is between these two, and connects it with Cambridge. A mill-dam, nearly two miles long and 50 feet wide, was completed in 1821 across the bay on the S. W. side of the city, at an expense of about \$500,000. The object of it is to open a new avenue, and also to create a water power sufficient to put in operation extensive tide mills and other water works.

The houses in the older part of the city are plain, and the streets generally narrow and crooked, but in West Boston and in several streets recently laid out, the private buildings are more splendid than in any other city in the United States. In 1817 there was erected on each side of Market street, a block of brick stores more than 400 feet in length, and 4 stories high; and on Central wharf, another immense pile of buildings was completed the same year, 1,210 feet long and containing 54 stores 4 stories high.

Among the public buildings are the State house, which is built on elevated ground, and commands a fine view of the surrounding country; the new court house, built of stone, at an expense of \$92,000; Faneuil hall, where all town meetings are held; a theatre; an almshouse; a custom-house; and 28 places for public worship, 11 of which are for Congregationalists, 4 for Episcopalians, 4 for Baptists, 2 for Methodists, 3 for Universalists, 1 for Roman Catholics, 1 for Friends a new Jerusalem church, and the seamen's chapel.

Among the literary institutions are the Boston Athenæum, which contains about 18,000 volumes; the Boston library, which has 5 or 6,000, and several other libraries belonging to literary societies. Among the benevolent institutions are the General Hospital founded in 1818, which has been richly endowed by the liberality of the state and of individuals; and a Hospital for the Insane, the buildings of which are situated in Charlestown.

Boston is very extensively engaged in commerce. There are probably few cities in the world where there is so much wealth

in proportion to the population. The amount of shipping owned here in 1815 was 143,420 tons; a greater amount than belonged to any other port in the United States, except New-York. The country in the immediate vicinity is fertile and populous, and connected with the capital by fine roads, while the Middlesex canal opens a water communication with the interior of New-Hampshire. The population of Boston in 1800 was 24,337; in 1810, 33,250; and in 1820, 43,298. The inhabitants have long been celebrated for their enterprise and intelligence, and for the liberality with which they support religious, literary and humane institutions.

The country around Boston is the admiration of every traveller of taste. The view from the dome of the State house surpasses any thing of the kind in this country, and is not excelled by that from the castle hill of Edinburgh, or that of the bay of Naples from the castle of St. Elmo. Here may be seen at one view, the shipping, the harbor variegated with islands and alive with business; Charles river and its beautiful country ornamented with elegant country seats; and more than 20 flourishing towns. The hills are finely cultivated, and rounded by the hand of nature with singular felicity.

Salem, the second town in New-England in commerce, wealth, and population, is built on a low peninsula, formed by two small inlets of the sea, called North and South rivers; over the former of which is a bridge 1,500 feet long, connecting the town with Beverly: the other separates it from Marblehead, and forms the principal harbor. The harbor is so shallow that vessels drawing more than 12 feet water must load and unload at a distance from the wharves.

The streets are crooked, and the houses are generally built of wood, but many of those recently erected are handsome edifices of brick. Among the public buildings are a court house, alms-house, market house, 3 banks, a museum belonging to the East-India Marine society, an athenæum containing more than 5,000 volumes, an orphan asylum, and 11 houses of public worship, 6 for Congregationalists, 2 for Baptists, 1 for Episcopalians, 1 for Friends, and 1 for Universalists.

The commerce of Salem is extensive. In 1816, it was the sixth town in the United States in amount of shipping, the number of tons being 34,454, of which nearly one half was employed in the India trade. This trade has been prosecuted with great spirit and success for many years, and has been a source of much wealth to the town. A society composed of masters and super-cargoes of vessels who have sailed round the cape of Good Hope or cape Horn, was incorporated in 1801, and now consists of about 160 members. A museum belongs to the society, composed of curiosities from all parts of the world, and is visited by strangers without expense. The inhabitants of Salem are celebrated for enterprise, industry and true republican economy. It is the oldest town in Massachusetts, except Plymouth, having been settled in 1626. The population in 1820 was 12,731.

Newburyport, the third town in the state in population and commerce, is situated on the south bank of Merrimack river, 3 miles from its mouth, and 24 miles north of Salem. It is one of the handsomest towns in the United States, the site being a beautiful declivity, the houses neatly built, and the streets wide and intersecting each other nearly at right angles. Among the public buildings are 2 banks; and 7 houses for public worship, 3 for Congregationalists, 2 for Presbyterians, 1 for Episcopalians and 1 for Baptists.

In 1815 Newburyport was the 10th town in the United States in amount of shipping. The number of tons was 24,922, employed partly in the coasting trade and fisheries and partly in the trade to the West Indies, Europe and the East Indies. The town is well situated for ship building, having the advantage of receiving lumber from the interior by Merrimack river. The harbor is deep, safe and capacious, but difficult to enter. The town suffered severely by the restrictions on commerce previous to the late war, and by fire in 1811. It has not yet fully recovered from these misfortunes. Population in 1810, 7,634; in 1820, 6852.

Gloucester is situated on the peninsula of Cape Ann, at the northern extremity of Massachusetts bay, 16 miles N. E. of Salem. It is one of the most considerable fishing towns in the Commonwealth. The amount of shipping owned here in 1815 was 11,980 tons. Population in 1820, 6,384. On the S. E. side of the town is Thatcher's island, on which are two light-houses.

Beverly lies directly north of Salem, and is connected with it by a bridge 1,500 feet in length. It has considerable trade, and the inhabitants are extensively engaged in the fisheries. Population, in 1820, 4,283.

Marblehead is on a peninsula, 16 miles N. E. of Boston and 4½ S. E. of Salem. It is more extensively engaged in the bank fisheries than any other town in the United States. In 1813 there were 80 vessels employed from this port in the fishery of the Grand Bank, manned by 760 men. The whole amount of shipping, in 1815, was 15,555 tons. Population in 1820, 5,630.

Lynn lies on the coast, 6 miles S. W. of Salem and 9 N. E. of Boston. It is famous for the manufacture of ladies' shoes. No less than a million pair were made here in 1811. They are sent in large quantities to the southern states and the West Indies. Population, in 1820, 4,515. *Lynn Beach* is regarded as a curiosity. It connects the peninsula of Nahant with the main land, and is a favorite place of resort for parties of pleasure from Boston, Salem and Marblehead.

Charlestown is beautifully situated on a peninsula formed by Mystic and Charles rivers, which unite immediately below in Boston harbor. A bridge across Charles river connects the town with Boston, and two others across Mystic river connect it with Malden, and with Chelsea. There is also a bridge across a bay of Charles river, on the west side of the town, connecting it with Cambridge. Among the public buildings are the state prison,

the Massachusetts Insane Hospital, an almshouse, town house ; and 5 houses for public worship, 2 for Congregationalists, 1 for Baptists, 1 for Universalists and 1 for Methodists. A navy yard of the United States occupies the S. E. part of the town. It consists of about 60 acres of land, on which are erected a marine hospital, a spacious ware house, an arsenal, and house for the accomodation of the superintendant, all of brick ; and an immense wooden edifices under which the largest vessels of war are built. The celebrated battle of "*Breed's hill*," commonly, but incorrectly called "*Bunker hill battle*," was fought in this town, June 17, 1775. The population of Charlestown in 1820 was 6,591.

Plymouth is on the coast 36 miles S. S. E. of Boston. It is the oldest town in New-England. The first settlers landed here on the 22d of December 1620. A part of the rock on which the pilgrims landed has been removed to the centre of the town, and the anniversary of their landing is still celebrated. The harbor of Plymouth is spacious but shallow. The amount of shipping in 1815, was 18,875 tons. Population in 1820, 4,384.

Provincetown is situated at the extremity of the peninsula of cape Cod, 60 miles S. E. of Boston by water, 116 by land. Its harbor, which is one of the best in the state, opens to the southward, and has depth of water for any ships. The houses are one story high and set on piles, that the driving sands may pass under them, otherwise they would be buried. The inhabitants derive their subsistence from the prosecution of the fisheries, and are dependent on Boston and on the towns in the vicinity for every vegetable production. Population in 1820, 1,225.

New Bedford is 52 miles south of Boston, on the estuary of a small river which flows into Buzzard's bay. It has a safe and commodious harbor. The inhabitants are extensively engaged in the whale fishery. In 1818 more than 20 vessels were employed in the whale fishery and many more in the Cod fishery, coasting trade, and foreign trade. The whole amount of shipping, in 1818, was 23,712 tons. Population, in 1820, 3,947. *Taunton* is a pleasant and flourishing town on the west side of Taunton river, 36 miles south of Boston. Population, in 1820, 4,520.

Worcester, the capital of Worcester county, is a pleasant and flourishing town 40 miles west of Boston. Population in 1820, 2,962. In 1819 a handsome and commodious building was erected here for the reception of the library and cabinet of the American Antiquarian society. The library consists of nearly 6,000 volumes, many of them rare and valuable works, and the cabinet is respectable.

Springfield stands on the east bank of Connecticut river, 87 miles west of Boston. It has several flourishing manufacturing establishments, and carries on an extensive inland trade. Population, in 1820, 3,914. The principal armory of the United States is in this town. The situation of the armory is remarkably pleasant and healthy, being a perfectly level elevated plat, about half a mile east of the village. The buildings are arranged

as a large square, and consist of one brick edifice 204 feet by 32, 2 stories high, occupied by lock filers, stockers and finishers; a brick forging shop, 150 feet by 32; a brick building 60 feet by 32, 2 stories high, the second story forming a large and spacious hall devoted to religious worship; a brick building 100 feet by 40, and 2 stories high, used as a depository of arms; and numerous smaller stores and shops.—The water works are situated on Mill river, about 1 mile south of the armory, and comprise 5 workshops, 28 forges, 10 trip-hammers and 18 water wheels, exhibiting the greatest assemblage of mills, and other water-works, to be found in the state. In the whole establishment are employed from 240 to 250 workmen, who complete, on an average, about 45 muskets daily, and the number may be increased to almost any extent. From 1795 to December 1817 128,559 muskets were made here.

Northampton is situated in the midst of a beautiful country, on the west bank of Connecticut river, 18 miles north of Springfield. It contained in 1820, 2,854 inhabitants. The prospect from Mount Holyoke in the immediate vicinity is one of the finest and most extensive in New-England.

The principal towns in Berkshire county are *Stockbridge* and *Lenox* on the Hoosienunc; *Pittsfield*, 12 miles north of Stockbridge, and *Williamstown*, the seat of Williams' college, in the N. W. corner of the state.

Education.] Massachusetts is highly distinguished for her literary institutions. There is a University at Cambridge, a college at Williamstown, a collegiate institution at Amherst, and a Theological seminary at Andover; besides numerous flourishing academies.

Harvard college, now the *University in Cambridge*, 3 miles W. N. W. of Boston, is the oldest and most wealthy literary institution in the United States. It was founded in 1638, in less than 20 years after the first settlement of New-England. Its officers in 1821 were a president, 20 professors, 5 tutors, a proctor and a regent. The Library is the largest in America, containing 25,000 volumes. The philosophical and chemical apparatus are complete. There is a valuable cabinet of minerals belonging to the university; an excellent anatomical museum; and a botanic garden, containing 8 acres, and furnished with an extensive collection of trees, shrubs and plants, both native and foreign.

The college buildings consist of the University hall, which is an elegant stone edifice containing the chapel, dining halls and lecture rooms; Harvard hall, containing the library, philosophical apparatus, museum, &c. 4 spacious brick edifices, containing rooms for students; and several other buildings, for the accommodation of the president, professors and students. An astronomical observatory is about to be erected on an expensive scale.

A law school, a medical school, and a theological seminary form part of the University. The whole number of students in 1821 was 374; of whom 29 were theological students, 13 law

students 55 medical students, and 277 undergraduates. The whole number who completed their education here from the establishment of the institution to the year 1821 was 4,622, a greater number than at any other college in the country.

Williams' college in Williamstown was incorporated in 1793. Its officers in 1821 were a president, 2 professors and 2 tutors. It has a respectable library, a valuable philosophical and chemical apparatus and at present about 50 students. The income of the charity funds is sufficient to pay the term bills of 25 students, and half of this is alike applicable to all indigent young men of merit, whether designed for the Christian ministry or not. The expenses of living at Williamstown are very moderate. Good board may be had for a dollar a week, and the best wood is sold for one dollar fifty cents a cord.

The *Collegiate institution at Amherst*, near Northampton, was established in 1821. It has a president, 3 professors, one tutor and 59 students. The library belonging to the institution contains 900 volumes, and the society libraries have about 400 more. The charity funds are large, and the expense of living very moderate.

The *Theological seminary at Andover*, 20 miles north of Boston, was founded in 1808 and has been richly endowed entirely by private bounty. The whole amount of what has been contributed for permanent use in this seminary, including the permanent funds, library and public buildings, is more than *three hundred and fifty thousand dollars*, and this has been contributed almost entirely from six families. In 1822 the officers were 4 professors and the number of students was 132. The whole number who have completed their education here is 312. The library contains about 5,000 volumes. The buildings are on a lofty eminence and command an extensive prospect. They consist of an elegant brick edifice, containing the chapel, library and lecture rooms; 2 spacious brick edifices, containing rooms for the accommodation of 128 students; and houses for each of the professors and the steward. A majority of the students are supported in whole or in part by charity.

Phillips' academy, also in Andover, is the most flourishing academy in the state. It was founded in 1778 by the Hon. Samuel Phillips, Esq. of Andover, and his brother, the Hon. John Phillips L. L. D. of Exeter. Its officers are a principal, 3 assistants, a teacher of sacred music and a writing master. The number of students in 1822 was 130, all of whom were pursuing the study of the learned languages. The institution is accommodated with a large and commodious brick building, 80 feet by 40, erected in 1818, on a range with the buildings of the Theological seminary. This academy and the Theological seminary are under the same Board of Trustees.

Population.] The population, in 1790, was 378,787; in 1800, 422,845; in 1810, 472,040 and in 1820, 523,287. It has on an average 72 persons to a square mile, and is the most thickly settled state in the Union.

Religion.] The Congregationalists are much more numerous than any other denomination of Christians. In 1817 they had 366 congregations; the Baptists, 91; Friends, 32; Episcopalians, 14; Universalists, 11; Presbyterians, 8. There are also a few Methodists and Roman Catholics.

Government.] The Legislative power is vested in a General court, consisting of a Senate and House of Representatives, both chosen annually by the people. The Senate consists of 40 members, chosen by districts. The Representatives are chosen by towns; each town having 150 rateable polls sends one Representative, and another for every additional 225 polls. The executive power is vested in a Governor, Lieut. Governor and a Council of 9 members. The two first are chosen by the people annually. The Council is chosen by the Legislature out of the 40 returned as Senators; and if they decline, from the mass of the people. The judicial power is vested in a Supreme court and several inferior courts, and the judges hold their offices during good behavior.

Roads.] The state is intersected in almost every direction by excellent turnpikes which centre in the capital. The turnpike from Boston to Newburyport, 33 miles, cost \$400,000; and that from Boston to Salem, 13 miles, more than \$200,000. The road from Boston to Providence, 40 miles, and from Boston to Worcester, 37 miles, are of the same expensive construction.

Manufactures.] Massachusetts is the third state in the Union in amount of manufactures. The value in 1810 was estimated at \$21,895,528. The principal articles are cotton goods, boots and shoes, ardent spirits, leather, cordage, wrought and cast iron, nails, straw bonnets, window glass and other glass ware.

Fisheries.] Massachusetts is more extensively engaged in the fisheries than any other state in the Union. In many populous towns on the sea-coast, a large proportion of the inhabitants derive their subsistence entirely from this employment. The cod fishery is prosecuted to a great extent from Marblehead, and the whale fishery from Nantucket and New-Bedford.

Commerce.] The principal exports are fish, beef, lumber, pork, ardent spirits, whale oil and various manufactures. The principal market for the western part of the state is New-York; for the country near Connecticut river, Hartford; for the towns near Rhode-Island, Providence; for the rest of the state, Boston, Salem and Newburyport. Boston is also the market for large sections of Vermont and New-Hampshire. In amount of shipping Massachusetts is the first state in the Union. In 1815, before Maine was separated, the number of tons was 452,273, which was about one third of the whole shipping of the United States.

Islands.] *Plum island*, which extends along the coast from Newburyport in a southerly direction, to Ipswich, is nine miles long and one broad, and is separated from the main land by a narrow sound, over which a bridge has been built. The island consists principally of sand blown into heaps, and crowned with bushes bearing the beach plum. In summer, when plums are

ripe, it is a favorite resort for parties of pleasure. On the north end of the island are two light-houses, and several houses have been erected by the Humane society, and furnished with conveniences for the relief of distressed mariners.

Nantucket island lies south of the peninsula of cape Cod, near $41^{\circ} 20'$ N. lat. and 70° W. lon. It is 15 miles long and contains about 50 square miles. The climate is mild compared with that of the adjacent continent. The soil is light and sandy, but in some parts is rich and productive, particularly in hay. It was formerly well wooded; but there is not now a single tree of native growth. The land is chiefly held in common by the inhabitants. All the cows, amounting to about 500 feed together in one herd; all the sheep, 14,000, in one pasture. The inhabitants are principally robust, enterprising seamen, extensively engaged in the whale fishery, and they have the reputation of being the most skilful and adventurous seamen in the world. They suffered severely both in the revolutionary and late war, a large portion of their shipping having been captured by the British. Since the peace, however, the whale fishery has revived, and there are now about 100 ships employed in this business. There are 30 spermaceti works on the island, employing a capital of \$500,000. *Nantucket*, the only town, is on the north side of the island. Its harbor is completely safe from all winds, being almost land-locked, the points at its entrance approaching within a mile of each other. It contains 2 banks; 2 insurance companies; and 5 houses of public worship, 2 for Friends, 2 for Congregationalists, and one for Methodists. Population, in 1820, 7,266.

Murtha's Vineyard lies west of Nantucket. It is 20 miles long, and from 2 to 10 broad. Edgartown, the chief town, contains 1,374 inhabitants. There is a spacious harbor on the north side of the island, called Holmes' hole, to which vessels bound to the eastward frequently resort, and wait for a wind to enable them to double cape Cod. The *Elizabeth islands* are small islands, extending in a row, about 18 miles in length, along the south side of Buzzard's bay.

RHODE-ISLAND.

Situation and Extent.] Rhode-Island is bounded N. and E. by Massachusetts; S. by the Atlantic; and W. by Connecticut. It extends from $41^{\circ} 17'$ to 42° N. lat. and from $71^{\circ} 6'$ to $71^{\circ} 52'$ W. lon. It is 49 miles long from north to south, and on its northern boundary 29 broad. The area is estimated at 1,580 square miles.

Divisions.] The state is divided into five counties and 31 towns.

Counties	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Providence,	10	30,769	35,736	Providence.
Kent,	4	9,834	10,228	Warwick.
Washington,	7	14,962	15,687	South Kingston.
Newport,	7	16,294	15,771	Newport.
Bristol,	3	5,072	5,637	Bristol.
Total,	31	76,931	83,059	

Bays.] Narraganset bay runs from north to south, dividing the state into two parts, and communicates with the ocean between point Judith on the west and point Seaconet on the east. It is about 30 miles long and 15 broad, and embraces several considerable islands. The northeast arm of Narraganset bay is called *Mount Hope bay*; the northwest arm, *Greenwich bay*; and the northern arm, *Providence bay*. The principal rivers which fall into it are *Providence river* from the north, and *Taunton river* from the northeast. The commissioners who were appointed to examine the coast of the United States, in 1817, were of opinion that this bay presented the best site for a naval depot in the Union north of Chesapeake bay. It is accessible from the sea at all seasons of the year; it affords capacious harbors, and can be entered from the ocean in a few hours' sail; it is not susceptible of a continued blockade; nor is it obstructed by ice.

Islands.] Rhode-Island, from which the state takes its name, is in Narraganset bay. It is 15 miles long and on an average $3\frac{1}{2}$ broad, containing about 50 square miles. Its climate is delightful; the summers are remarkably pleasant, and the winters milder than on the continent. Travellers have called it the Eden of America. *Canonicut* is a beautiful island, 7 miles long and 1 broad, lying northwest of Rhode-Island. *Prudence island* lies N. E. of Canonicut. *Block-island*, 10 miles S.W. of point Judith, is 7 miles long and 4 broad, and contains about 700 inhabitants.

Face of the Country, &c.] The northern part of the state is hilly, and has a thin and barren soil; the rest is chiefly level. The islands and the country bordering on Narraganset bay are very fertile, and celebrated for their fine cattle, their numerous flocks of sheep, and the abundance and excellence of their butter and cheese. The southwestern part of the state is an excellent grazing country.

Rivers.] The following are the principal rivers. 1. *Pawtucket river* rises in Massachusetts, in Worcester county, and running in a southeasterly direction falls into *Providence river* one mile below the town of Providence. There are falls of about 50 feet descent, 4 miles from its mouth. Below the falls the river is called the *Seckonk*. 2. *Providence river* is formed by two small rivers which unite just above Providence. It is navigable to Providence for ships of 900 tons. 3. *Pawtuxet river* falls into *Providence river* 5 miles below the town of Providence. It abounds with falls, which furnish fine situations for mill-seats and manufacturing establishments. There are about 40 cotton fac-

tories on this river and its branches. 4. *Pawcatuck river* waters the S. W. part of the state, and runs into Stonington harbor. In the latter part of its course it is the boundary between this state and Connecticut.

Chief Towns.] *Providence*, the largest town in the state, and the third in New-England in respect to population, stands on Providence river, just above the mouth of the Seekhonk; 35 miles from the ocean, and 40 S. S. W. of Boston. The town is built on both sides of the river, and the two parts are connected by an elegant bridge. Merchant ships of the largest class ascend to this place. Many of the private houses are handsome buildings, and the appearance of the town has been recently much improved by the construction of side walks along the principal streets paved with flag stones. Among the public buildings are the colleges; 7 banks; and 13 houses of public worship, 4 for Baptists, 3 for Congregationalists, 2 for Methodists, 1 for Episcopalians, 1 for Friends, 1 for Universalists and one for Africans. Several of the churches are elegant edifices.

Providence is one of the wealthiest and most flourishing towns of its size in the United States. The principal source of its prosperity is the cotton manufacture, which was introduced about 15 years ago, and has increased with astonishing rapidity. There are now more than 100 cotton factories in Rhode-Island and the adjacent parts of Massachusetts and Connecticut, the business of which is transacted principally in Providence. Among the manufacturing establishments within the town are 5 cotton factories, 2 woollen factories, 5 distilleries, 3 rope-walks, and 10 jeweller's shops, where jewelry is manufactured principally for exportation. The commerce of the town has increased with its manufactures. The amount of shipping in 1819 was 19,000 tons, of which about 5,000 were employed in the East-India trade, and 5,000 or 6,000 in the coasting trade with the southern states, connected principally with the cotton business. Ten or twelve vessels are constantly employed in the exportation of cotton goods. In September, 1815, the town suffered severely from a tremendous gale, which forced the water in the river many feet above the highest tides, and deluged the town, destroying houses and shipping to an amount estimated at \$1,500,000. Population, in 1820, 11,767.

Newport stands on the S. W. side of Rhode-Island, 5 miles from the sea and 30 S. by E. of Providence. The harbor spreads westward before the town, and is one of the finest in the world. It is of a semicircular form, of safe and easy access, sufficiently capacious to contain a large fleet, and deep enough for vessels of the largest burden. The town is built on a beautiful declivity, rising gradually from the harbor, and presents a fine view as you approach it from the water. The beauty of its situation and the salubrity of its climate have made it a place of fashionable resort from the Southern and Middle states during the summer months. Newport was formerly the first town in the state, but it has now

fallen behind Providence in commerce and population. The number of inhabitants in 1820 was 7,319.

Bristol is on the east side of Narraganset bay, 15 miles S. S. E. of Providence. It has a safe and commodious harbor, and is a place of considerable trade. The amount of shipping owned here in 1815 was 6,944 tons. Population, in 1820, 3,197. *Warren* is a pleasant town adjoining Bristol on the north. *Warwick*, on Greenwich bay, 10 miles S. S. W. of Providence, is extensively engaged in the manufacture of cotton goods. It has no less than 15 cotton factories, and in 1820 contained 3,643 inhabitants. *Pawtucket village*, situated at the falls of Pawtucket river, 4 miles N. E. of Providence, is one of the most flourishing manufacturing villages in the United States.

Education.] Brown university in Providence is one of the most flourishing and respectable literary institutions in the United States. It was originally established at Warren, in 1764, and was removed to Providence in 1770. It has a president, 8 professors, 2 tutors and 160 students. The college library contains about 6,000 volumes, and the society libraries of the students 2,000 or 3,000 more. The philosophical apparatus is extensive and complete. There are two college edifices of brick, containing rooms for 200 students. They are pleasantly situated on an eminence, and command an extensive and variegated prospect. It is required that the president and a majority of the trustees of this university should be of the Baptist denomination.

Common schools are not supported by law in Rhode-Island as in the other New-England states. Academies, however, are established in all the principal towns, and private schools are maintained during the winter months in almost every part of the state.

Population.] The population in 1790 was 68,835; in 1800, 69,122; in 1810, 76,931; in 1820, 83,059, or 53 for each square mile. In Charlestown, on the southern shore of the state, are the remains of the once famous Narraganset tribe of Indians. They are now reduced to about 100 souls, and are a miserable, degraded race of beings.

Religion.] The Baptists are the most numerous denomination of Christians. They have 57 congregations; the Friends, 18; Congregationalists, 11; Episcopalians, 5; Moravians, 1; Jews, 1.

Government.] The constitution of the state is the charter granted to the colony by Charles II. in 1663. The legislative power is vested in a General Assembly consisting of two branches, the Senate and House of Representatives. The Senate consists of ten members, and the House of Representatives of two deputies from each town, with the exception of Providence, Portsmouth, Warwick and Newport; the three first of which are entitled to four each, and the last to six. The Representatives are chosen semi-annually. The executive power is vested in a Governor, or, in case of his death, in a Lieut. Governor, both of whom have

seats in the Senate. The possession of a freehold estate is a necessary qualification of a voter.

Manufactures and Commerce.] In no state in the Union is so large a proportion of the population and capital employed in manufactures as in Rhode-Island. The principal article is cotton goods, which are manufactured in large quantities in Providence and the vicinity. There are now more than 90 cotton mills in the state, many of which are extensive establishments.—The exports are fish, beef, pork, cattle, lumber, &c. Cotton goods and other manufactured articles are also transported in considerable quantities to the Southern states. In 1819 there were 33 banks in this state, of which 7 were at Providence, 5 at Newport, and 5 at Bristol.

CONNECTICUT.

Situation and Extent.] Connecticut is bounded N. by Massachusetts; E. by Rhode-Island; S. by Long-Island sound; and W. by New-York. It extends from 41° to $42^{\circ} 2'$ N. lat. and from $71^{\circ} 29'$ to $73^{\circ} 24'$ W. lon. It is 72 miles long on the northern boundary and 45 on the eastern. The area is estimated at 4,674 square miles.

Divisions.] The state is divided into 8 counties and 122 towns.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
1. New-London,	15	34,707	35,943	New-London.
2. Middlesex,	7	20,723	22,405	Middletown.
3. New-Haven,	17	37,064	39,616	NEW-HAVEN.
4. Fairfield,	18	40,950	42,739	Fairfield.
5. Litchfield,	22	41,375	41,267	Litchfield.
6. Hartford,	18	44,733	47,264	HARTFORD.
7. Tolland,	10	13,779	14,330	Tolland.
8. Windham,	15	28,611	31,684	Brooklyn.
Total,	122	261,942	275,248	

The four first named counties border on Long-Island sound from east to west; the four last border on Massachusetts from west to east. Hartford and Middlesex counties are intersected by Connecticut river.

Face of the Country.] The face of the country is greatly diversified by hills and vallies. The hills are generally of a moderate size, and occur in quick succession, presenting to the traveller a beautiful and constantly varying prospect. There are several ranges of mountains which come from Massachusetts, and traversing the state from north to south terminate near Long-Island sound. Beginning in the east, the first is the *Lyme range*,

which runs on the east side of Connecticut river, at the distance of 8 or 10 miles, and terminates in Lyme at the mouth of the river. This range throws off a branch in Glastenbury, which runs S. W. across Connecticut river and terminates in East Haven. The next is the *Mount Tom range*, which runs on the west side of the Connecticut, in a direction nearly south, and terminates at New-Haven in a fine perpendicular bluff called East Rock. The *Green mountain range* is still farther west. It runs nearly parallel with the Mount Tom range and terminates also in New-Haven in a noble bluff called West Rock. The *Taghkannuc range* runs on the west side of the Hooestennuc along the western boundary of the state, and terminates in Norwalk near the S. W. extremity of the state. There are no lofty summits in these ranges. The highest are the Blue hills, in Southington, in the Mount Tom range, and these are supposed not to exceed 1,000 feet in height.

Soil and Productions.] The soil is generally excellent, and fitted for all the purposes of agriculture. Much of it has been under actual cultivation for the greater part of a century, and still retains its original strength. The county of Fairfield and the interval land on Connecticut river are the best in the state. Indian corn, rye, grass and potatoes are the principal agricultural productions. Oats and flax are also raised extensively. Almost every farm has one or more orchards, and great quantities of cider are annually made. The crops of onions, turnips and beans are also of great consequence to the Connecticut farmer. Immense numbers of neat cattle and of hogs are fattened upon maize. Cheese is made in great quantities and constitutes the chief produce of several towns.

Rivers.] The following are the principal rivers, beginning in the east; 1. The *Thames* is formed by Shetucket and Yantic rivers which unite at Norwich landing; whence the common stream pursues a southerly course for 14 miles, and discharges itself into Long-Island sound at New-London. It is navigable for sea vessels to Norwich. The *Shetucket* is formed by the union of the Willimantic, Mount Hope and several other streams, which rise in the northern part of the state and unite in the town of Windham; whence the common stream proceeds in a S. E. direction, and after receiving the Quinibaug from the east, joins Yantic river and forms the Thames. The *Quinibaug* rises on the borders of Massachusetts, and running south joins the Shetucket 3 miles above Norwich landing.

2. The *Connecticut* comes from Massachusetts, and running at first in a southerly and afterwards in a southeasterly direction, falls into Long-Island sound between Saybrook and Lyme. There is a bar at the mouth which at full tide has 10 feet water. The river is navigable for vessels drawing 8 feet of water to Hartford, 50 miles. *Farmington river* is a western branch of the Connecticut. It rises in Massachusetts, and runs in a southeasterly direction to Farmington in this state, where it turns to the north and running at the foot of the western declivity of the Mount Tom range of mountains for 15 miles, is joined by Salmon river and

rushes through an opening in the range and down a considerable cataract, after which it is called Windsor river, under which name it pursues a southeasterly direction, and joins the Connecticut 4 miles above Hartford. A canal is in contemplation to connect Farmington river with New-Haven harbor.

3. The *Hooestennuc* rises in the northern part of Berkshire county in Massachusetts, and running in a southerly direction, between the Taghkannuc and Green mountain ranges, enters this state near its N. W. corner, between the townships of Canaan and Salisbury. About 7 miles from the line it is precipitated over a perpendicular declivity 60 feet in height; after which it runs at first in a southerly and then in a southeasterly direction till it falls into the sound between Milford and Stratford. A bar of shells at its mouth prevents the entrance of large vessels. It is navigable for sloops and brigs 12 miles, to Derby.

Chief Towns.] There are 5 incorporated cities in Connecticut, viz. Hartford, New-Haven, Middletown, New-London and Norwich.

Hartford, one of the capitals of the state, is regularly laid out on the west bank of Connecticut river, 50 miles from its mouth. It is advantageously-situated for trade, being at the head of sloop navigation, and having an extensive, fertile and thrifty back country. The city is generally well built and makes a handsome appearance. Among the public buildings are a state house; an asylum for the deaf and dumb, and 6 houses of public worship. There are also 8 distilleries, and manufacturing establishments of various kinds. An elegant bridge over the Connecticut, built at an expense of more than \$100,000, connects the town with East Hartford. Population of the city in 1820, 4,726, and including the township 6,901.

New-Haven, the seat of Yale college and the semi-capital of Connecticut, lies around the head of a harbor, which sets up 4 miles from Long-Island sound, 34 miles S. S. W. of Hartford. The city is built on a large plain, encircled on all sides except those occupied by the water, by a fine amphitheatre of hills and mountains, several of which present bold and perpendicular fronts, nearly 400 feet in height. The city is divided into two parts, called the Old and New Townships. The old town is laid out in a large square, divided into 9 smaller squares; each 52 rods on a side, and separated by streets 4 rods in breadth. The central square is open, and is believed to be one of the handsomest in the United States. On and around it are most of the public buildings, viz. a state house; six college edifices; 3 elegant churches, 2 for Congregationalists and 1 for Episcopalians; and a Methodist church.

The houses in New-Haven are generally built of wood, in a neat and commodious, but not in an expensive style. Several of those recently erected, however, are elegant and stately edifices of brick. The principal streets are ornamented with trees, and most of the houses are furnished with a piece of ground in the rear, sufficiently large for a garden and fruit trees, giving to the

city a rural and pleasant appearance. In the north corner of the town, a burying ground has been laid out on a plan entirely new. The field is divided into parallelograms, which are subdivided into family burying places. The ground is planted with trees; the monuments are almost universally of marble, and a considerable number are obelisks. The whole has a solemn and impressive appearance.

The harbor is well defended from winds, but is shallow and gradually filling up with mud. This difficulty has been remedied in part by the construction of a wharf nearly a mile in length, extending into the harbor. Population of the city in 1820, 7,147, and including the township, 8,327.

Middletown is pleasantly situated on the west bank of Connecticut river 31 miles from its mouth, 15 miles south of Hartford, and 26 N. E. of New-Haven. It is a flourishing town, and has considerable commerce. There are also several important manufactories in the town, most of them recently established. Among them are a sword factory, where about 5,000 swords are annually manufactured; a pistol factory, which employs 60 or 70 men, who make 8,000 or 10,000 pistols annually; a rifle factory, which employs from 25 to 30 hands, and produces 1,000 or 1,200 rifles in a year; an ivory comb factory, and a factory of block-tin buttons. These have all been established since 1813, and most of the swords, pistols and rifles have been sold to the government of the United States. Population of the city in 1820, 2,618; and including the township, 6,479.

New-London is near the S. E. corner of the state, on the west bank of the Thames, 3 miles from its entrance into the sound. The harbor is the best in the state, having 5 fathoms water, and being safe, spacious and accessible at all seasons of the year; but it is easily blockaded, as was proved during the late war. It is defended by two forts on opposite sides of the river. The inhabitants own considerable shipping, employed in the coasting trade, the trade with the West Indies, and the fisheries. Population in 1820, 3,330.

Norwich is on the Thames, 14 miles north of New-London and 38 S. E. of Hartford. It is favorably situated for trade, being at the head of navigation on the river, and having an extensive and productive back country. The Yantic river, which here unites with the Shetucket to form the Thames, has a cataract about a mile from its mouth, remarkable for its romantic scenery, and affording fine sites for mills and manufacturing establishments. The point of land formed by the union of Shetucket and Yantic rivers is called Chelsea landing, and is the seat of most of the commercial business of the place. Population of the city in 1820, 2,983, and including the township, 3,634.

Litchfield, the seat of a celebrated law school and of Morris academy, is 30 miles W. of Hartford and 36 N. N. W. of New-Haven. *Wethersfield* is pleasantly situated on the west bank of Connecticut river 4 miles below Hartford. It is famous for raising great quantities of onions. *Smybrook*, one of the oldest towns

in the country, stands on the west bank of Connecticut river at its mouth. *Stafford*, famous for its mineral spring and iron works, is 27 miles N. E. of Hartford. *Fairfield*, the chief town in Fairfield county, is on the coast, 22 miles W. S. W. of New-Haven. The borough of *Bridgeport*, 4 miles N. E. of Fairfield, has one of the best harbors in the state and is a thrifty commercial place.

Education.] *Yale college*, in New-Haven, is one of the oldest and most respectable colleges in the United States. It was founded in 1701, and was named after Governor Yale one of its most liberal benefactors. Its officers in 1821 were a president; 9 professors, including 4 medical professors; and 6 tutors. The college library contains about 7,000 volumes, and the students have libraries amounting to 2,000 more. A cabinet of minerals was deposited here in 1811 by George Gibbs Esq. the original cost of which is said to have been £4,000 sterling.

The college buildings consist of 4 spacious edifices, each 4 stories high, and each containing 32 rooms for students; a chapel, containing also a philosophical chamber; a lyceum, containing the library and recitation rooms; a laboratory; and a dining hall.

A medical institution is connected with the college. It was established in 1813, and has 4 professors, a valuable anatomical museum and a medical library. The whole number of students in 1821 was 407; of whom 78 were medical students, 4 resident graduates and 325 under-graduates. The whole number educated here from the establishment of the institution to 1820 was 3,478; of whom there were then living 1,884, a greater number than from any other college in the United States. Efforts are now making for the establishment of a Theological seminary, to be connected with the college.

The American Asylum for the education of the deaf and dumb, established in Hartford in 1817, was the first institution of the kind in America. It is under the direction of Rev. Thomas H. Gallaudet, who visited the celebrated schools in Europe to qualify himself for the charge. He has 4 assistants. The number of pupils in 1819 was 50. The Congress of the United States has made a generous grant to the Asylum of more than £3,000 acres of land; and the Legislatures of some of the states have made appropriations for the support of pupils. The success of the institution has hitherto been highly gratifying, and the improvement of the pupils has equalled the most sanguine expectations of their friends.

There is a *Foreign mission school* at Cornwall, 10 miles N. W. of Litchfield, under the direction of the American Board of Commissioners for Foreign Missions. It was established in 1817 for the purpose of educating heathen youth from various parts of the world. After they have received their education, they are to be sent home to instruct their own countrymen. In 1821 the number of heathen pupils was 20; of whom 7 were Sandwich Islanders, 1 Otaheitan, 1 New Zealander, 1 Malay and 19 Amer-

ican Indians. Several natives of the Sandwich islands, who were educated at this school, have already returned to their country well qualified for usefulness.

A *Law school* was established at Litchfield in 1784 by the Hon. Tapping Reeve. It has been justly considered as the most respectable and systematic law school in the United States. The number of students educated since its establishment is more than 600.

Bacon academy in Colchester, 15 miles west of Norwich, was founded in 1801. Its funds are \$30,000 and the number of scholars is usually about 90. The *Episcopal academy* at Cheshire, 13 miles north of New-Haven, has a fund of \$25,000; and usually about 70 students. There are also academies at Plainfield, Litchfield, and almost all the principal towns in the state.

Common schools are universally established. They are supported by a school fund arising from the sale of lands in Ohio, which formerly belonged to the state. This fund amounted in May 1821 to \$1,700,000, and the yearly income, together with \$12,000 from the public taxes, is annually devoted to the maintenance of common schoolmasters in every town in the state. The amount paid to the towns from this fund in 1818 was \$70,914. The whole amount of the state tax in 1817 was only \$48,362; the income of the fund exceeding the amount of the tax by more than 22,000 dollars.

Religion.] The Congregationalists are the most numerous religious denomination. In 1818 they had 213 congregations; the Episcopalians, 74; Baptists, 90; and Methodists 53. There are very few of any other sect.

Government.] The legislative power of the state, according to the new constitution, adopted in 1818, is vested in a general assembly, consisting of two houses, viz. the Senate and the House of Representatives. The Senate consists of 12 members, chosen annually by general ballot. The House of Representatives consists of 201 members, chosen by the different towns; the larger towns being each entitled to two Representatives and the smaller towns to one. The executive power is vested in a governor who holds his office for one year. A lieutenant governor is also appointed, who is ex officio President of the Senate. Any person of 21 years of age, having resided in a town for six months, and possessing a freehold estate of the annual value of seven dollars is entitled to vote at all elections of state officers. The judicial power of the state is vested in a Supreme court of errors, a Superior court, and such inferior courts as the General Assembly shall from time to time establish. The judges of the Supreme court and of the superior court hold their offices during good behaviour, but no judge or justice of the peace is capable of holding his office after he has arrived at the age of 70 years.

Population.] The population in 1790 was 23,946; in 1800, 251,002; in 1810, 261,942, and in 1820, 275,248. The state is very thickly settled, and many thousands emigrate every year to the western country.

Roads and bridges.] There are numerous turnpike roads, connecting the principal towns and intersecting the state in every direction. The most expensive is that from Hartford to New-Haven, which is 34 miles long. The common roads are generally good. The most considerable bridge is that over the Connecticut at Hartford. The bridges on this river are frequently carried away by freshets, especially when the ice breaks up in the spring of the year.

Mineral waters.] There is a mineral spring at Stafford, which is more celebrated than any other in New-England. The waters are efficacious in cases of dropsy, gout, rheumatism, scorbutic, scrofulous and cancerous complaints; and are much resorted to in the summer season.

Manufactures.] In Connecticut a larger portion of the population are engaged in manufactures than in any other state except Rhode-Island. The manufacture of tin into culinary vessels is carried on to a very great extent. The ware, thus made, is taken by pedlars and sold in all parts of the United States, in Florida, Louisiana and Canada. *Berlin*, 10 miles south of Hartford, is the principal seat of the tin manufacture. In Hamden, which adjoins New-Haven on the north, there is an extensive gun factory, where large quantities of fire arms have been made. Cotton and woollen goods, nails, glass, hats, buttons, wooden clocks, and many other articles are among the manufactures.

Commerce.] The principal exports are horses, mules, butter and cheese, cider, Indian corn, beef, pork, &c. The foreign trade is carried on principally with the West Indies; but the exports in the coasting trade to the Southern states are of more value than those in the foreign trade.

NEW-YORK.

Situation and Extent.] New York is bounded N. by Lower Canada; E. by Vermont, Massachusetts, and Connecticut; S. by New-Jersey and Pennsylvania; and W. and N. W. by Upper Canada, from which it is separated by lake Erie, Niagara river, lake Ontario, and the river St. Lawrence. It extends from 40° 35' to 45° N. lat. and from 73° to 79° 55' W. lon. Its length from east to west on the parallel of 42° is 340 miles. The area is estimated at 46,000 square miles or 29,494,720 acres.

Divisions.] The state contains 4 districts, which are divided into 50 counties, and subdivided into towns.

SOUTH DISTRICT.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Suffolk,	9	21,113	24,272	Riverhead.
Queens,	6	19,336	21,519	North Hempstead.
Kings,	6	8,303	11,187	Brooklyn.
Richmond,	4	5,347	6,135	Southfield.
New-York,	1	96,373	123,706	New-York.
Westchester,	21	30,272	32,638	Bedford.
Total,	47	180,744	212,457	

MIDDLE DISTRICT.

Sullivan,	7	6,108	8,900	Thompson.
Delaware,	17	20,303	26,587	Delhi.
Rockland,	4	7,758	8,837	Clarkstown.
Orange,	11	34,374	41,213	Newburg.
Ulster,	13	26,576	30,934	Kingston.
Greene,	10	19,536	22,996	Catskill.
Columbia,	14	32,390	38,300	Hudson.
Dutchess,	13	41,174	46,615	Poughkeepsie.
Putnam,	5	10,293	11,268	Camel.
Total,	95	198,452	235,650	

EAST DISTRICT.

Rensselaer,	14	36,300	40,153	Troy.
Albany,	8	34,661	38,116	Albany.
Saratoga,	19	33,147	36,052	Ballston.
Washington,	16	44,289	38,831	Salem.
Warren,	9		9,453	Caldwell.
Essex,	13	9,477	12,811	Elizabethtown.
Clinton,	6	8,002	12,070	Plattsburg.
Franklin,	6	2,717	4,439	Ezraville.
Hamilton,	3		1,251	
Schenectady,	6	10,201	13,081	Schenectady.
Montgomery,	12	41,214	37,569	Johnstown.
Total,	112	220,017	243,826	

WEST DISTRICT.

Schoharie,	9	18,945	23,154	Schoharie.
Otsego,	21	38,802	44,856	Cooperstown.
Herkimer,	15	22,046	31,017	Herkimer.
St. Lawrence,	17	7,835	16,037	Ogdensburg.
Jefferson,	15	15,140	32,952	Watertown.
Lewis,	7	6,433	9,227	Martinsburg.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Oneida,	21	33,792	50,997	Utica.
Oswego,	12		12,374	Oswego.
Madison,	12	25,144	32,208	Cazenovia.
Chenango,	17	21,704	31,215	Norwich.
Onondaga,	12	25,987	41,467	Onondaga.
Courtland,	10	8,868	16,507	Homer.
Broome,	6	8,130	14,343	Binghamton.
Cayuga,	10	29,843	38,897	Auburn.
Seneca,	7	16,609	23,619	Ovid.
Tompkins,	5		20,681	Ithaca.
Tioga,	9	7,899	16,971	Spencer.
Ontario,	35	42,032	88,267	Canandaigua.
Steuben,	14	7,246	21,989	Bath.
Genesee,	33	12,588	58,098	Batavia.
Alleghany,	9	1,942	9,330	Angelica.
Niagara,	17	8,971	22,990	Buffaloe.
Cattaraugus,	5		4,090	Olean.
Chataouque,	8		12,568	Chataouque.
Total,		325	347,418	673,849
Grand total,		579	959,049	1,372,812

Face of the Country.] The southeastern angle of the state is mountainous, being traversed by several ridges from New-Jersey. The country near lake Champlain is hilly, and becomes mountainous as you approach the height of land which divides the waters flowing into this lake from those flowing into the St. Lawrence. West of this height of land, a fine country, at first hilly, then level and fertile, extends to the St. Lawrence and lake Ontario. The western part of the state is principally level, except near the Pennsylvania boundary, where it becomes hilly and mountainous. From Genesee river, near its mouth, to Lewiston on the Niagara river, there is a remarkable ridge running in a direction from east to west almost the whole distance, which is 78 miles. Its general height above the neighboring land is 30 feet; its width varies considerably, and in some places is not more than 40 yards. Its elevation above the level of lake Ontario is perhaps 160 feet, to which it descends by a gradual slope, and its distance from that water is between 6 and 10 miles. There is every reason to believe that this remarkable ridge was once the margin of lake Ontario. About 20 miles south of this ridge, and parallel with it, there is another, which runs from Genesee river to Black rock on Niagara river. The country between the two ridges is called the Tonawanta valley, and there is some reason to believe that it was once covered with the waters of lake Erie.

Mountains.] The mountains of New-York are sometimes considered as a continuation of the great Alleghany or Appalachian ranges. Several ridges come from Pennsylvania and New-Jer-

sey, and proceeding in a N. E. direction, cross Hudson river between 40 and 60 miles from its mouth, and then passing through Dutchess, Columbia and Rensselaer counties, join the Taghkanic range on the western border of Massachusetts. At the place where they cross Hudson river they are about 16 miles in width, and are called the *Highlands*. Several of the summits are here from 1,200 to 1,300 feet high, but there is no obstruction to the navigation of the river.

From the Highlands a range proceeds in a northerly direction along the west bank of the Hudson, through the county of Ulster, into Green county, where it is known under the name of the *Catskill mountains*. These mountains are the highest land in the state. Roundtop, the highest summit, according to the measurement of Capt. Partridge, is 3,804 feet above the level of the sea. High peak, the next highest, is 3,718 feet above the sea. These summits are about 20 miles west of the city of Hudson. From the Catskill mountains a ridge of hills proceeds in a N. W. direction across Mohawk river, where it forms the Little Falls; after which it continues its progress, diminishing in altitude, till it crosses the St. Lawrence into Canada.

The mountains in the northern part of the state, which lie around the sources of the Hudson, and form the height of land between the waters of lake Champlain and the St. Lawrence, are called the *Peruvian mountains*. The highest part of the range is in Essex county; Whiteface, in the town of Jay, commands a view of Montreal, 80 miles distant, and is supposed to be 3,000 feet above the level of the sea.

Lakes.] Lakes Erie, Ontario, and Champlain lie partly in this state. Lake George is a beautiful lake, 36 miles long and about 2 broad, between Washington and Warren counties. It lies south of lake Champlain, and communicates with it by an outlet 3 miles long, in which distance the water descends nearly 100 feet. The lake is surrounded by high mountains, and is much celebrated for the romantic beauty of its scenery. The water is deep, remarkably transparent, and abounds with the finest fish. Lake George was for a long time conspicuous in the wars of this country, and several memorable battles were fought on its borders.

Oneida lake, which lies chiefly in the county of Oneida, is 20 miles long, and on an average 3 broad. It receives Wood creek at its east end, and discharges itself through Oswego river into lake Ontario.—There is a chain of small lakes lying south of Seneca river and communicating with it. The following are their names, beginning in the east; 1. *Onondaga* or *Salt lake*, in the county of the same name, is only 6 miles long and $1\frac{1}{2}$ broad; but on its borders are the celebrated salt springs, the largest and strongest in America. It discharges itself at its northern extremity into Seneca river. 2. *Skeneateles*, 15 miles long, also discharges its waters into Seneca river, through an outlet 10 miles long. 3. *Owasco lake*, in Cayuga county, is 11 miles long and communicates through Owasco creek with Seneca river. 4. *Cayuga lake*, lying between Cayuga and Seneca counties, is 40 miles long

It receives the waters of Seneca lake through Seneca river, which enters it at its northern extremity, and soon after issues from it again, forming the outlet of its waters. 5. *Seneca lake* lies west of Cayuga lake, and nearly parallel with it, at the distance of from 6 to 15 miles. It is 35 miles long and from 2 to 4 broad. It receives the waters of Crooked lake from the west, and discharges itself at its northern extremity through Seneca river into Cayuga lake. 6. *Crooked lake* is about 18 miles long, and communicates through an outlet at its N. E. extremity with Seneca lake. 7. *Canandaigua lake* is a beautiful collection of water about 14 miles long and on an average one broad. It communicates with Seneca river through Canandaigua river, which issues from the northern extremity of the lake.

Rivers.] *Delaware river* forms part of the boundary between this state and Pennsylvania. *Niagara river* connects lake Erie with lake Ontario, and forms part of the western boundary. The *St. Lawrence* separates New-York from Upper Canada. *East river* is the name given to a short strait, which connects Long-Island and sound with New-York harbor.

Hudson river, the great river of this state, and one of the best for navigation in America, rises in the mountainous region between lake Champlain and the St. Lawrence, and pursuing a southerly course of more than 300 miles, falls into the Atlantic below New-York city. It is navigable for ships to Hudson; for large sloops to Albany, 160 miles from New-York; and for small sloops to Troy, at the head of the tide, 6 miles further. The passage of this river through the Highlands without any impediment to its navigation is a singular fact in Geography. The Highlands are about 16 miles wide, and are celebrated for their romantic scenery.

The *Mohawk*, the great western branch of the Hudson, rises in Oneida county, and running south of east, passes by Rome, Utica and Schenectady, and discharges itself into the Hudson through several mouths, between Troy and Waterford, after a course of about 135 miles. The navigation of the river is interrupted by numerous rapids and falls, the principal of which is the Cahoes, two miles from its mouth. The river, which is here between 300 and 400 yards broad, descends, at high water, in one sheet, to the depth of 70 feet. About three fourths of a mile below, a bridge has been thrown across the Mohawk, from which the view of the falls is inexpressibly grand.

The principal river which falls into lake Champlain is the *Saranac*, which discharges itself at Plattsburg, after a northeasterly course of about 65 miles.

The principal rivers which fall into the St. Lawrence from this state are, the *St. Regis*, *Grass* and *Racket* rivers, all of which discharge themselves near the village of St. Regis, on the northern boundary of the state; and the *Orwogatchie*, which empties itself at Ogdensburg after a course of 120 miles.

The following are the principal rivers which fall into lake Ontario. 1. *Black river* rises in the high lands northeast of Rome,

and after a northerly course discharges itself into Hungry bay near Sacket's harbor. 2. *Oswego* river forms the outlet of Oneida lake, and is 42 miles long. Its principal tributary is *Seneca* river, which issues from the north end of Seneca lake, and running east enters Cayuga lake, but almost immediately leaves it again, and after receiving the waters of Canandaigua, Owasco, Sheneateles and Onondaga lakes, discharges itself into the Oswego at Three river point, 24 miles from lake Ontario. 3. *Genesee* river rises in Pennsylvania, and running in a northerly direction across the western part of this state, discharges itself into lake Ontario. At Rochester, a few miles from its mouth, there are two falls, one of 96 and the other of 75 feet. About 70 miles above Rochester there are two other falls, only a mile apart, one of which is 60 and the other 90 feet.

Tonawanta creek rises in Genesee county, and after a westerly course of 90 miles through the Tonawanta valley, discharges itself into Niagara river about 12 miles from lake Erie. It is a deep sluggish stream, boatable 30 miles.—The *Susquehannah* rises in Otsego lake, in the county of the same name, and runs in a southwesterly direction into Pennsylvania. Its principal tributaries from this state are, the *Chenango*, which rises in Madison county, and flowing south through the counties of Chenango and Broome, joins the *Susquehannah* 18 miles east of Oswego, after a course of 90 miles; and the *Tioga*, which rises in Pennsylvania, and running N. E. into this state receives the *Conhocton* at Painted post, and then turning to the S. E. re-enters Pennsylvania, and meets the *Susquehannah* at Tioga point, 5 miles from the boundary line.

Niagara Falls.] The falls in Niagara river are one of the grandest curiosities on the globe. The river flows from south to north, and is 35 miles long. At its efflux from lake Erie it is three quarters of a mile wide, from 40 to 60 feet deep, and flows with a current of 7 miles an hour. As it proceeds, the river widens, and embosoms several considerable islands, particularly Grand and Navy islands, which terminate in beautiful points a mile and a half above the falls. A little below the termination of these islands, commence the rapids, which extend a mile, to the precipice, in which space the river descends 57 feet. At the precipice it is three fourths of a mile wide. Here Goat island divides the river into two channels; and the channel between Goat island and the eastern or United States' shore, is also divided by a small island. Over the precipice the river falls perpendicularly about 160 feet. Much the greater part of the water passes in the channel between Goat island and the Canada shore, and this fall is called from its shape the Horse-shoe fall. Between Goat island and the small island in the eastern channel, the stream is only 2 or 10 yards wide, forming a beautiful cascade. Between this small island and the United States' shore the sheet of water is broad, and the descent is greater by a few feet than at the Horse-shoe fall, but the stream is comparatively shallow.

The falls are seen to advantage from different positions. The best single view is that from the Table rock on the Canada side

of the river ; and the best view of the rapids is from Goat island, which is ingeniously connected by a bridge with the eastern shore. The view from the river below is the most entire. Below the falls the river runs between perpendicular banks, 300 feet high, to Queenstown, 7 miles ; thence to lake Ontario the country is open.

Soil and Productions.] The eastern half of Long island is sandy and barren ; the western part is fertile, and in a high state of cultivation. The country on the Hudson, below the mouth of the Mohawk, has a good soil, particularly the counties of West Chester and Dutchess, which are under very good cultivation. The alluvial flats of Columbia county and some parts of Rensselaer are very extensive and rich. A district west of Albany, comprising several counties, consists of sandy plains interspersed with marshes. The alluvial flats on the Mohawk are extensive and very fertile. The country north of the Mohawk is less accurately known, but many parts of it are fertile, particularly the lands on Black river, which are among the best in the state. The vast elevated plain which covers the western part of the state, and includes the country occupied by the small lakes, has a rich soil, equally well adapted to grain and grass. The alluvial flats are here extensive ; those on Genesee river include about 60,000 acres. Wheat is raised in this state in greater abundance than all other grains. Indian corn, rye, oats, flax, and hemp, are also extensively cultivated.

Minerals.] Iron ore is found in many parts of the state of an excellent quality and in inexhaustable quantities. There are indications of the abundant existence of coal in the western parts of the state. Lime, marble, lead, marl, flint, gypsum, slate for building, clays for manufacturing, and ochres of various kinds, have been discovered in great quantities. Salt springs exist in Cayuga, Seneca, Ontario and Genesee counties, but the principal salt works are in Onondaga county, at the village of Salina, situated on the S. E. side of Onondaga lake. Every gallon of water here yields from 16 to 27 ounces of salt, being much stronger than any other salt springs in the United States. The quantity of salt manufactured in 1811 in Onondaga county was 453,840 bushels, and it may be increased to any extent.

Mineral springs.] The celebrated mineral springs of Saratoga are spread over a tract of about 12 miles in length in Saratoga county, and are called by a variety of local names. The most noted are those at the villages of Ballston and Saratoga, which are superior to any other in America. The names of the principal springs in Saratoga, are Rock spring, Congress spring and Columbia spring. These springs afford relief in many obstinate diseases, and during the summer months, are the resort of the gay and fashionable, as well as of invalids, from all parts of the United States. Large houses of entertainment, with neat bathing houses, are erected for the convenience of visitors.

Chief Towns.] NEW-YORK, the first commercial city in America, is on Manhattan island, at the confluence of Hudson and East rivers, in lat. 40° 42' N. 90 miles N. E. of Philadelphia and 210 S.

W. of Boston. The island is 15 miles long, and on an average $1\frac{1}{2}$ broad, and is separated from New-Jersey by the Hudson; from the continental part of New-York by Haarlem creek; and from Long island, by East river.

The compact part of the city is at the south end of the island, and extends along the Hudson about 2 miles; and from the Battery, in the S. W. corner, along East river, nearly 4 miles. Its circuit is about 8 miles. The streets of the ancient part, at the south end of the city, are frequently narrow and crooked, but all the northern part has been recently laid out, and with much better taste. The principal street is Broadway, which is 80 feet wide, and extends from the Battery in a N. E. direction, through the centre of the city, for three miles. It is generally well built, and a part of it is splendid. The houses in the city generally, were formerly of wood, but these are fast disappearing, and substantial brick houses, with slated roofs, are rising in their place.

Among the public buildings the most prominent is the City Hall, which is the most beautiful edifice in the United States. It is 216 feet long, 106 broad, and, including the attic story, 56 high. The front and both ends above the basement story, are built of white marble. The expense was \$500,000. It is occupied by the city council in their meetings, and by the different courts of law.—The New-York Hospital comprises the Hospital for the reception of the sick and disabled, the lunatic asylum, and the lying in hospital. The annual expenditure is about \$10,000. During the year 1819, 1,725 patients were admitted, of whom 1,320 were cured. The Alms House is a plain stone structure recently erected on East river, 2 miles from the City Hall. It is 3 stories high 330 feet long and 50 wide. The expense, including the work house, penitentiary, and other buildings connected with it was \$418,781. The number of poor in this institution for the year 1818 was 1,487 and the expense of the establishment \$90,886. The State prison is on the Hudson, at Greenwich, about $1\frac{1}{2}$ mile from the City Hall. It is constructed of free stone. The number of prisoners in 1819 was 604. The original cost of the establishment was \$208,846, and large sums have been voted by the legislature to defray the annual expenses. The New-York Institution is near the City Hall, and its apartments are occupied by the literary and philosophical society; the historical society, which has a library of about 5,000 volumes, and a permanent fund of \$12,000; the American academy of Fine Arts, which has a valuable collection of paintings and statues; the Lyceum of natural history; and the American museum.

Among the other institutions are a theatre, Vauxhall and other public gardens, an orphan asylum, an asylum for the deaf and dumb, 11 banks, 11 insurance companies, numerous benevolent and charitable institutions, and 57 houses for public worship, viz. 18 for the different classes of Presbyterians, 12 for Episcopalians, 8 for Methodists, 6 for Baptists, 3 for Friends, 2 for Roman Catholics, and one each for German Lutherans, German Calvinists,

Moravians, Universalists, Jews, seamen, Swedenborgians, and Unitarians.

The Battery is a beautiful open space, containing several acres of ground, at the S. W. point of the city. It commands a fine view of the harbor, with its shipping, islands, and fortifications, and is much frequented by the citizens. The Park is a handsome common, in front of the City Hall, containing 4 acres, and is also a place of fashionable resort. The Elgin Botanic garden is $3\frac{1}{2}$ miles from the City Hall, and contains about 20 acres. It was founded in 1801 by Dr. David Hosack, and was purchased by the state in 1810, for \$74,268, and presented to the Medical college.

New-York harbor is a large bay, 9 miles long and 4 broad, which spreads before the city on the south side, having Long island on the east, and Staten island and New-Jersey on the west. On the north it receives the Hudson; on the N. E. it communicates with Long island sound through East river; on the west with Newark bay, through the Kills; and on the south with the Atlantic ocean through the Narrows. It embosoms several small islands, as Governor's island, Bedlow's island and Ellis's island, near the city of New York, on each of which are fortifications. The harbor is deep enough for the largest vessels, well secured from wind and storms, sufficiently spacious for the most numerous fleet, and the currents are so rapid, that it is seldom obstructed by ice.

New-York is admirably situated for commerce, on an excellent harbor, at the mouth of a noble river, with an extensive, fertile, and populous back country. It imports most of the goods consumed in the state of New-York, the northern half of New-Jersey, and the western parts of New-England; and exports the produce of the same section. This city owns more shipping than any other in the Union, and more than half as much as the city of London. The amount of shipping in 1816 was 299,617 tons. The revenue from the customs, collected at this port, is about one fourth of the whole revenue of the United States: in 1815, it was \$14,409,790. The revenue of the city for city purposes, for the year ending May 12, 1817, was \$483,011.

Few cities in the world have increased so regularly and rapidly as New-York. In 1697, the population was 4,302; in 1756 13,040; in 1790, 33,131; in 1800, 60,489; in 1810, 96,373; and in 1820, 123,706. The inhabitants are from many different nations. More than one third are of New-England origin. After these, the most numerous are the Dutch and Scotch, and then the English, Irish, and French.

ALBANY, the seat of government, and the second city in the state in population, wealth and commerce, is situated on the west bank of the Hudson, 160 miles north of New-York. A large proportion of the houses are built of brick, with slate or tile roofs, and the style of building has very much improved within a few years. Among the public buildings are a state house, substantially built of stone, at an expense of \$115,000; an ele-

gant academy of red free stone ; a jail ; an almshouse, theatre, arsenal and 11 houses for public worship. The city is supplied with excellent water from a spring, 3 miles distant, by an aqueduct which conveys it to every house. Albany is finely situated for commerce, at the head of navigation for large sloops on the Hudson ; and the canals now in progress will soon connect it with lake Champlain and lake Erie. Several steam boats ply regularly between this city and New-York, and usually perform their passages in about 30 hours. The population of Albany in 1820 was 12,630.

Troy, on the east bank of the Hudson, 6 miles above Albany, is considered the third town in the state in commerce and wealth. The city is regularly laid out on a plain, and makes a beautiful appearance. It contains a courthouse, 2 banks, and 5 houses for public worship. Troy is finely situated for a commercial and manufacturing town, being at the head of sloop navigation on the Hudson, and the creeks which here fall into the river affording numerous excellent situations for mills and manufactories. Population, in 1820, 5,264. *Lansingburgh* is a flourishing town, 3 miles north of Troy, on the same side of the river. *Waterford* is on the Hudson, at its confluence with the Mohawk, opposite Lansingburgh, with which it is connected by a bridge, 10 miles above Albany. *Sandy Hill* is a handsome compact village, on the east bank of the Hudson, 52 miles N. of Albany, immediately above Baker's falls, where the water descends 76 feet within 60 rods. *Fort Edward* is situated a few miles south of Sandy Hill, on the same side of the Hudson, near the great bend, and at the point where the canal from lake Champlain opens into the river. In the old wars it was an important military station, controlling the communications between the Hudson, lake Champlain and lake George. *Whitehall* is a thriving village, situated at the southern extremity of lake Champlain, on both sides of Wood creek, at its entrance into the lake. The canal from lake Champlain to the Hudson commences here, and the trade of a considerable extent of country is concentrated in the village.

Hudson is finely situated 30 miles south of Albany, on the east bank of Hudson river, which is navigable to this place for the largest ships. The site of Hudson is a high point which projects into the river, terminating in a bold cliff, on each side of which are bays of considerable extent. The city is regularly laid out, and in 1820 contained 5,310 inhabitants. The creeks on the borders of the town afford fine seats for mills and manufactories, and a few years since, Hudson was regarded as the third town in the state in manufactures and the fourth in commerce. *Poughkeepsie* stands on the east bank of Hudson river, 85 miles south of Albany and 75 N. of New-York. It is well situated for commerce and manufactures, and in 1820 contained 5,726 inhabitants. *Newburgh* is on the west bank of the Hudson, 5 miles below Poughkeepsie, and in 1820 contained 5,812 inhabitants.

Schenectady, the seat of Union college, is regularly laid out on a plain on the S. E. side of Mohawk river, 15 miles N. W. of Albany.

The city contained in 1820, 3,939 inhabitants. *Utica* is situated on the south bank of the Mohawk, 93 miles W. N. W. of Albany. It is handsomely laid out in streets and squares, and contained in 1820, 2,972 inhabitants. This village is the central point where the principal turnpikes from various parts of the state unite, and is a thoroughfare of the travel between a large section of the western country and the Atlantic ports. The Erie canal also passes through it and will add to its commercial importance. *Rome*, on the Mohawk, 15 miles N. W. of Utica, is a place of considerable business.

Plattsburgh is on lake Champlain, at the mouth of Saranac river. In the bay before this town the American fleet under Commodore M'Donough captured a British fleet of superior force on the 11th Sept. 1814. *Ogdensburg* is 116 miles north of Utica, at the confluence of the Oswegatchie with the St. Lawrence. It has a safe and spacious harbor and is well situated for trade.

Sacket's Harbor is on Black river bay, a branch of Hungry bay, at the east end of lake Ontario. The harbor is perhaps the best on the lake. It is well situated both for shelter and defence, and is sufficiently deep for the largest vessels. Here are several ships of war, built during the late war, and among them two ships of the line of the first rate. *Buffalo* is situated at the mouth of Buffalo creek, which discharges itself into Niagara river, just at the point where it leaves lake Erie. It has considerable trade, being situated on the best channel of intercourse between the Atlantic and the regions of the west. It has suffered hitherto for want of a good harbor, Buffalo creek being obstructed at its mouth by sand and gravel driven in by the wind. *Black Rock*, on Niagara river, 2 miles below Buffalo, is at present the station for the steam boats and other vessels employed in the navigation of lake Erie.

Auburn, the capital of Cayuga county, is situated at the outlet of Owasco lake, 170 miles west of Albany, on the great western turnpike. It has numerous mills and manufactories, and a state prison large enough to contain 1,000 prisoners. A Presbyterian Theological seminary has been lately established here. *Genesee* is a beautiful and flourishing town on the west side of Seneca lake near its outlet.

Canals.] For several years past the state has been engaged in the improvement of its inland navigation, on a scale before witnessed in this country, and with an energy and success which excite universal admiration. A grand canal is now in progress, which will open a water communication from the river to lake Erie, and another is already commenced on the same river with lake Champlain.

The Erie canal, when completed, will be 190 miles long. The route is as follows: Beginning at Albany, it passes up the west bank of that river to the mouth of the Mohawk; then along the south bank of the Mohawk, through the counties of Albany, Schenectady, and Oneida to Rome. From

tion, and crosses Oneida creek into Madison county, where it turns to the west and passes through Onondaga county, approaching within a mile and a half of Salina, at the south end of Onondaga lake. It crosses Seneca river at Montezuma, and passing by Lyons and Palmyra, strikes the Genesee river at Rochester. West of the Genesee river, it runs on the south side of the Ridge road, and parallel with it for 60 miles, and then turning to the south, joins Tonnewanta creek 11 miles from its mouth in Niagara river. The channel of the Tonnewanta will be made use of for these 11 miles, and the canal will then proceed in a southerly direction, from the mouth of the Tonnewanta, along the east bank of Niagara river, to Buffalo on lake Erie.

This route may be divided into three sections. The western section extends from Buffalo to Montezuma on Seneca river, 160 miles: through this distance, the level of the canal uniformly descends from the lake, and the whole descent is 194 feet by 25 locks. The middle section extends from Montezuma to Rome, 77 miles; through this distance the level of the canal uniformly ascends, and the whole ascent is 49 feet. The eastern section extends from Rome to Albany, 113 miles: through this distance the level of the canal uniformly descends, and the whole descent is 419 feet by 46 locks. The aggregate of rise and fall is therefore 862 feet, and the difference of levels between lake Erie and the Hudson, 564 feet.

The canal is 40 feet wide on the surface, 28 at the bottom, and 4 feet deep. It was estimated by the commissioners in 1817 that the whole expense would be \$4,881,733, viz: the western section \$1,856,862; the middle section, \$853,186; the eastern section, \$2,196,690; and general expenses, \$75,000. The canal was commenced on the 4th of July 1817, and the commissioners anticipate its entire completion before the close of the year 1823.

Among the benefits of this grand enterprise, it is expected, that besides furnishing an outlet for the agricultural produce of vast and fertile regions, salt may be supplied to the Atlantic states from the great salt works at Salina, cheaper than from abroad. In the progress of the canal, also, gypsum of the best quality has been discovered, and in great quantities for sale by the whole United States.

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commenced in 1820, which is to extend along the west bank of the Hudson to Waterford, at the mouth of the Mohawk, a distance of 27 miles. The whole expense of continuing the Champlain canal from Fort Edward to Waterford, was originally estimated at \$621,000, but from a more minute examination of the country, and the discovery of unexpected facilities, the estimate is now reduced to \$400,000. It is expected that the whole will be completed, and a navigation opened from lake Champlain to the tide waters of the Hudson in 1822. Plans have been recently submitted to the legislature of the state for improving the navigation of the Hudson below the head of tide waters, so as to admit of the ascent of ships to Albany.

At Rome there is a canal, one mile and an half long, connecting Mohawk river with Wood creek, and opening a communication through this creek, Oneida lake, and Oswego river, into lake Ontario.

Education. *Columbia college*, formerly called King's college, in the city of New-York, was established in 1754. It has a president, 5 professors, 140 students, a library of 3,000 or 4,000 volumes, a valuable philosophical apparatus, and an annual revenue of more than \$4,000. A Faculty of medicine was formerly attached to the institution, but in 1814 it was separated from it.

Union college, in Schenectady, was incorporated in 1794, and is a very flourishing institution. The college edifices are finely situated on an elevated spot of ground, and contain accommodations for more than 200 students. The philosophical apparatus is respectable. The library contains about 5,000 volumes. The officers in 1820 were a president, 4 professors, and 2 tutors. The number of students at the same period was 245.

Hamilton college, situated near the village of Clinton, 10 miles W. S. W. of Utica, was incorporated in 1812, and has been liberally patronised by the legislature and by individuals. It has a president, 3 professors, 2 tutors, a library of about 2,000 volumes, and 100 students. The college buildings are about a mile west of the village, on a high hill, commanding a very extensive prospect.

A college of Physicians and Surgeons was established in the city of New-York in 1807, and in 1814 the Faculty of Medicine which was formerly attached to Columbia college, was united with it. Thus united, the college of Physicians has 7 professors, and is one of the most respectable and flourishing medical institutions in the country. The Elgin Botanic garden is attached to this institution.

The *Common School* fund consisted in 1822 of \$1,139,130 and 25,000 acres of land. It yields annually the sum of \$77,417, which is appropriated to the support of common schools, and it appears from the report of the Superintendent in 1820, that nine tenths of all the children in the state between 5 and 15 years of age received instruction.—Besides the common schools and the colleges, there are 40 or 50 incorporated academies in the state. All these institutions are under the superintendence of a body of

literary men, called "the Regents of the University of New-York." The Regents are appointed by the legislature, and it is their duty to visit the colleges, academies and schools; to inspect the system of education, and make yearly report thereof to the legislature; to incorporate colleges and academies, and also to distribute among these institutions the income of a fund appropriated by the legislature to the encouragement of literature. The Literature fund amounted in 1822 to \$99,535, and yielded an income of \$5,142.

Religion.] The denominations of Christians in this state are Presbyterians, Episcopalians, Associate Reformed Presbyterians, Dutch Reformed Presbyterians, Congregationalists, Baptists, Methodists, Friends, German Lutherans, German Calvinists, Moravians, Catholics and Shakers. Religion is not supported by law. All denominations are left at liberty to support their own ministry in such way as is most agreeable to them.

Government.] The Legislature consists of a Senate of 32 members, and of a House of Representatives, who may not exceed 150. The state is divided into four great districts for the choice of Senators. They hold their seats for four years, and one fourth part is elected every year. The Representatives are chosen annually by counties. The Governor and Lieut. Governor are elected for three years. A Council of Appointment, consisting of the Governor and a Senator from each of the four great districts, is chosen annually by the Legislature. The number of officers annually appointed by this Council is enormous; embracing most of the subordinate officers of the state.

Population.] The population of New-York has increased with astonishing rapidity for the last 70 years. In 1756 it was 110,317; in 1790, 340,120; in 1800, 586,050; in 1810, 959,049; and in 1820, 1,372,812, of whom 10,088 were slaves and 29,289 free blacks. The whole population has thus more than quadrupled within the last 30 years. The Dutch were the original settlers of the state, and their descendants constitute still a respectable portion of the population; but probably two thirds of the present inhabitants are emigrants from New-England or their immediate descendants. Next to the New-Englanders and the Dutch, are the English, Irish, Scotch and French.

Indians.] There are about 5,000 Indians in this state. They are principally the remains of the Iroquois or Six Nations, a powerful confederacy of Indians, who formerly occupied a great part of the state. The names of the tribes are, Mohawks, Senecas, Oneidas, Onondagas, Cayugas, and Tuscaroras. The Mohawks live at present on Grand river in Upper Canada; the Senecas, on Genesee river, Alleghany river, Buffalo creek, and other places in the western part of the state; the Oneidas, at Oneida castle, near Oneida lake; the Onondagas, principally at Onondaga village, near the lake of the same name, and the Cayugas near Buffalo; and the Tuscaroras, at a village a few miles south of Oneida castle. The Stockbridge Indians, about 400 in number, live in a place called New Stockbridge, 7 miles S. of Oneida castle.

Revenue and Debt.] The expenses of the canals are defrayed from monies obtained on loan. For the payment of the interest, a canal fund is provided, consisting of auction duties, duties on salt, canal tolls, and 5,000 dollars as a commutation for a tax on steam boat passengers; all of which together yield at present about \$200,000 annually. The general fund of the state, exclusive of the school fund, the canal fund and the literature fund, amounts to \$3,077,857, principally in bank stock, and bonds and mortgages. The revenue for the year 1822, was estimated at \$469,928. Independently of the general fund, the state owns nearly \$1,000,000 acres of land. The public debt, besides the canal debt, amounts to \$1,280,000, for which a yearly interest of \$76,800 is paid.

Commerce and Manufactures.] The exports consist principally of pot and pearl ashes, wheat, Indian corn, rye, beef, pork, and lumber. Their value, in 1816, was \$19,690,031; in 1820, \$13,163,244, about one third of which was foreign produce. The exports from New-York exceed those of any other state in the Union, and in 1815 it paid more than one third of the revenue of the United States, and more than twice as much as any other state. In amount of shipping it is surpassed only by Massachusetts, and in the value of manufactures only by Pennsylvania. The value of the manufactures, in 1810, was \$25,370,289; the amount of shipping, in 1815, 309,290 tons; and the revenue paid in 1815, \$14,491,739.

Islands.] Long island extends in an easterly direction from the city of New-York, 140 miles in length. Its average breadth is 10, and the area is estimated at 1,400 square miles. The eastern end of the island is indented by a deep bay, and the most eastern point is a cape, well known to mariners, called Montauk point. The north side of the island is rough and hilly, but the soil is well calculated for raising grain, hay and fruit. The south side lies low, and has a light, sandy soil, but is well adapted to Indian corn and various kinds of grain: on the sea-coast are extensive tracts of salt meadow. The island is divided into three counties, King's, Queen's and Suffolk. King's county, at the west end of the island, is inhabited chiefly by the Dutch. This county and the western part of Queen's have been rendered fertile and productive by husbandry. The greater part of Suffolk has a thin soil, yet it is well furnished with wood, and large quantities of this article are sent to the New-York market. Along the south side of the island for 100 miles, there is a narrow beach of sand and stones, between which and the shore is a long narrow bay, 3 miles broad in the widest places. There are various inlets through the beach, which admit vessels of 60 or 70 tons.

Staten island forms the county of Richmond. It is 14 miles long and 8 broad, and lies 9 miles S. W. of New-York city. It is separated from Long-Island by the Narrows, and from the Jersey shore by a narrow strait called Staten island sound. New-York bay is on the N. E. and Amboy bay on the south.

Grand island, in Niagara river, is 12 miles long and from 2 to 7 broad, and contains 48,000 acres. It commences three miles

below Black rock, and terminates $1\frac{1}{2}$ above the falls. The land is well wooded, and capable of cultivation. This island is the property of the state, and constitutes part of the fund for defraying the expenses of the Erie canal.

NEW-JERSEY.

Situation and Extent.] New-Jersey is bounded N. by New-York; E. by the Atlantic ocean, and Hudson river, which separates it from New-York; S. by Delaware bay, and W. by Delaware river which separates it from Pennsylvania. It extends from 74° to $75^{\circ} 29'$ W. lon. and from 39° to $41^{\circ} 24'$ N. lat. It is 160 miles long from north to south, and contains 8,320 square miles, or 5,324,000 acres.

Divisions.] The state is divided into 13 counties and 120 towns.

Counties.	Towns.	Pop. in 1810.	Pop. in 1820.	Chief towns.
1. Sussex,	15	25,549	32,752	Newtown.
2. Bergen,	7	16,603	18,178	Hackinsac.
3. Morris,	10	21,328	21,368	Morristown.
4. Essex,	12	25,984	30,793	Newark.
5. Somerset,	7	14,728	16,506	Boundbrook.
6. Hunterdon,	10	24,553	28,604	TRENTON.
7. Middlesex,	8	20,331	21,470	Amboy.
8. Monmouth,	7	22,150	25,038	Freshhold.
9. Burlington,	12	24,979	28,322	Burlington.
10. Gloucester,	12	19,744	23,089	Gloucester.
11. Salem,	9	12,761	14,022	Salem.
12. Cumberland,	8	12,670	12,668	Bridgetown.
13. Cape May,	3	3,632	4,265	
Total,	120	245,562	277,575	

Bays.] Delaware bay separates New-Jersey from Delaware. Amboy bay lies directly south of Staten island, and opens into the Atlantic between Sandy Hook and the Long island shore. Newark bay is directly north of Staten island: it communicates with New-York bay on the east, through a narrow strait called the Kills, and with Amboy bay on the south through a long, narrow strait, called Staten island sound.

Capes.] Sandy Hook is a noted point of land projecting from the Jersey shore in Monmouth county. The highlands of Neversink are on the sea-coast near the Hook, and are the first lands that are discovered by mariners, as they come upon the coast. Cape

May, at the southern extremity of the state, is one of the capes of Delaware bay.

Face of the Country.] The three northern counties are mountainous, being traversed from S.W. to N.E. by several ridges, which are considered as a continuation of the great Alleghany or Appalachian range; the next four are agreeably diversified with hills and vallies. The six southern counties, including all the coast from Sandy Hook to Cape May, are level and principally barren, producing little else but shrub-oaks and yellow pines.

Soil and Productions.] The mountainous and hilly parts of the state have generally a strong soil, and form a fine grazing country. The farmers there raise great numbers of cattle for the markets of New-York and Philadelphia. They also raise wheat, rye, maize, buckwheat, potatoes, &c. Near New-York and Philadelphia, great attention has been paid to the cultivation of fruit and vegetables; and the finest apples, pears, peaches, plums, cherries and melons are carried to these markets. Fine orchards abound in all the northern half of the state, and the cider of New-Jersey, particularly that of Newark, is of proverbial excellence.

Minerals.] The most important mineral production is iron, which is found in immense quantities among the mountains in the northern part of the state. In the county of Morris there are 7 rich iron mines, 2 furnaces, 3 rolling and slitting mills, and about 80 forges. Great quantities of bog iron ore are also found in the southern counties; and the annual produce in the whole state is estimated at 2,500 tons, exclusive of hollow ware and various other castings, of which vast quantities are made.

Rivers.] The *Delaware* separates New-Jersey from Pennsylvania. It is navigable for sloops to Trenton, where there are falls which obstruct the navigation; but above the falls it is navigable 100 miles for boats of 8 or 9 tons. *Hudson river* forms part of the eastern boundary.

Raritan river is formed by two branches which rise in the western part of the state and unite in Somerset county. After their union the river runs a little S. of E. and passing by New-Brunswick and Amboy, falls into Amboy bay. Steam boats and sloops of 80 tons ascend to New-Brunswick, 17 miles.—The *Passaic*, which falls into Newark bay 2 or 3 miles from the town of Newark, is navigable 10 miles for small vessels. At Patterson, 15 miles north of Newark, is the cataract or great falls. The river, which is here 40 yards wide, moves in a slow, gentle current, until coming to a precipice it falls 70 feet perpendicularly in one entire sheet, presenting a scene of singular beauty and grandeur. The *Hackinsack* rises in New-York, and flowing south at the distance of 4 or 5 miles from the Hudson, falls into Newark bay near the mouth of the *Passaic*. *Great Egg Harbor river* rises in Gloucester county, and during the latter part of its course forms the boundary between the counties of Cape May and Gloucester. It is navigable 20 miles for vessels of 200 tons.

Chief Towns.] TRENTON, the capital of the state, is on the east side of Delaware river, opposite the falls, 30 miles N. E. of Philadelphia. At the foot of the falls there is an elegant bridge over the Delaware, 1,100 feet long and 36 wide. The city contains a handsome state house; an academy; 2 banks; and 2 cotton factories erected in 1815, one of which is a very extensive establishment, employing more than 350 hands. Population, in 1820, 3,942.

New Brunswick, the seat of Queen's college, is on the S. W. bank of the Raritan, 27 miles N. E. of Trenton. Population, in 1820, 6,764. About half of the inhabitants are of Dutch origin. *Princeton* is a pleasant village of about 100 houses, on the great road between New-York and Philadelphia, 50 miles from the former and 40 from the latter. The college of New-Jersey and the Theological Seminary of the Presbyterian church are in this place.

Newark is pleasantly situated near the west bank of Passaic river, 2 or 3 miles in a direct line from its mouth, and 9 miles west of New-York city. It is a beautiful town and contains 2 banks, an academy, and five houses of public worship, 2 for Presbyterians, and one each for Episcopalians, Baptists and Methodists. Population, in 1820, 6,507. *Elizabethtown* is pleasantly situated 6 miles south of Newark, on Elizabethtown creek, which discharges itself into Staten island sound at Elizabethtown point, 2 miles below. Vessels of 200 or 300 tons come up to the mouth of the creek, and a steam boat regularly plies between the city of New-York and Elizabethtown point. Population, in 1820, 3,515.

Burlington, the capital of Burlington county, is on Delaware river, 11 miles below Trenton. Population, in 1820, 2,758. The most populous part of the town is on an island in the Delaware. *Perth Amboy*, situated on a point of land at the union of Raritan river with Arthur Kull sound, 35 miles S. W. of New-York city, has one of the best harbors on the continent. *Patterson*, situated at the great falls of the Passaic, 15 miles north of Newark, is a flourishing manufacturing village. In 1821 it contained 11 cotton mills; 3 flax mills, where the duck for the U. States' navy is manufactured; a mill for rolling sheet iron, and a nail factory. Population, in 1820, more than 1,700.

Canal.] It has long been in contemplation to open a navigable communication between Philadelphia and New-York, by means of a canal from New-Brunswick on the Raritan, to Trenton on the Delaware. A company was incorporated in New-Jersey many years ago for this purpose, and a survey of the intended route was made, from which the practicability of a canal for sea vessels was ascertained. The expense is estimated at \$800,000.

Education.] The *College of New-Jersey*, at Princeton, was founded in 1732, and has always been one of the most respectable and flourishing literary institutions in the country. In 1820 it had a president, 3 professors, 3 tutors and 121 students. The college library contains about 8,000 volumes; the philosophical

apparatus is complete, and the cabinet of mineralogy and natural history is valuable. The college edifice is of stone, and styled Nassau Hall in honor of the Prince of Orange.

A *Theological seminary* was also established in Princeton in 1812, by the General Assembly of the Presbyterian church. It has 3 professors, and the number of students in 1821 was 73. The edifice for the accommodation of the institution is a stone building 150 feet by 50, four stories high, and containing rooms for 100 students. The term of study is three years. During the sessions of the General Assembly of the Presbyterian church, and the General Synod of the Associate Reformed church, in the spring of 1821, a plan was adopted to effect a union of the two churches and of their respective Theological seminaries, which has since been carried into effect. The library of the Associate Reformed church's Theological seminary, formerly established in New-York, and consisting of 4,000 valuable volumes (which cost \$17,000,) has been transferred to Princeton, and the funds of the two institutions are also united.

Queen's college was founded in New-Brunswick by ministers of the Reformed Dutch church, for the education of their clergy, and incorporated in 1770. In 1810, a Theological seminary was established in the city by the General Synod of the Reformed Dutch churches, and to a certain extent connected with the college. The two departments, however, are maintained by different funds, and are amenable to different tribunals. The college edifice is of stone, 3 stories high and unfinished. The exercises of the college have for some time past been suspended, and the building appropriated to the accommodation of Theological students. The library contains 700 or 800 volumes. The Theological department has 2 professors, and about 15 students.

Population.] The number of inhabitants in 1790 was 184,139; in 1800, 211,149; in 1810, 245,562, and in 1820, 277,575, of whom 7,557 were slaves and 12,460 free blacks. The northern part of the state is most populous. Many of the inhabitants emigrate every year to the new settlements in the western country.

Religion.] The Presbyterians are the most numerous religious denomination. The number of their churches in 1818, was 74; of Dutch Reformed, 31; of Baptists, 30; of Episcopalians, 24; of Congregationalists, 9. At the same time the Friends had 44 meeting houses, and the Methodists were numerous.

Government.] The legislature is composed of a legislative council and house of assembly. The council is chosen annually, and consists of 13 members, each county choosing one. The assembly consists of 35 members, and is chosen annually. The executive is composed of a Governor, chosen by joint ballot of the legislature; a vice-president, chosen by the council; and a privy council, consisting of three members of the legislative council.

Manufactures and Commerce.] Iron is extensively manufactured in Morris county. Shoes are made in great numbers at Newark. The value of the manufactures of the state in 1810 was estimated at \$7,054,594. Almost all the foreign goods con-

sumed in this state are imported at New-York and Philadelphia, and the produce of the state is principally carried to those cities for exportation. The value of the exports from the ports of this state, in 1820, amounted only to \$20,531; and the amount of duties paid in 1815 was only \$13,612. The amount of shipping in 1816 was 33,211 tons.

PENNSYLVANIA.

Situation and Extent.] Pennsylvania is bounded N. by New-York; E. by New-Jersey, from which it is separated by Delaware river; S. E. by the state of Delaware; S. by Maryland and Virginia; W. by a part of Virginia and Ohio, and N. W. for a little distance, by lake Erie. It extends from $39^{\circ} 42'$ to $47^{\circ} 17'$ N. lat. and from $74^{\circ} 32'$ to $80^{\circ} 27'$ W. lon. It is 307 miles long from E. to W. and 160 broad. The area is estimated at 46,000 square miles. It is very regular in its shape; the northern and southern boundaries being parallels of latitude, and the western boundary a line of longitude.

Divisions.] The state is divided into 51 counties and about 740 townships.

Counties.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Adams,	15,152	19,370	Gettysburg.
Alleghany,	25,317	34,921	Pittsburg.
Armstrong,	6,143	10,324	Kittanning.
Beaver,	12,168	15,340	Beaverton.
Bedford,	15,746	20,248	Bedford.
Berks,	43,146	46,275	Reading.
Bradford,		11,554	Meansville.
Bucks,	32,371	37,842	Newtown.
Butler,	7,346	10,193	Butler.
Cambria,	2,117	3,287	Ebensburg.
Centre,	10,681	13,798	Bellefonte.
Chester,	39,596	44,451	Westchester.
Clearfield,	875	2,342	Pike.
Columbia,		17,621	Danville.
Crawford,	6,178	9,397	Meadville.
Cumberland,	26,757	23,606	Carlisle.
Dauphin,	31,883	21,653	HARRISBURG.
Delaware,	14,374	14,810	Chester.
Erie,	3,758	8,553	Erie.
Fayette,	24,714	27,235	Union.
Franklin,	23,083	31,892	Chambersburg.
Greene,	12,544	15,554	Waynesburg.
Huntingdon,	14,778	20,142	Huntingdon.
Indiana,	6,214	8,882	Indiana.
Jefferson,	161	561	Jefferson.
Lancaster,	53,927	68,336	Lancaster.
Lebanon,		16,983	Lebanon.
Lehigh,		18,895	Northampton.

Counties.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Luzerne,	18,109	20,027	Wilksbarre.
Lycoming,	11,096	13,517	Williamsport.
M'Kean,	142	728	Cerestown.
Mercer,	8,277	11,681	Mercer.
Mifflin,	12,132	16,618	Lewistown.
Montgomery,	29,703	35,793	Norristown.
Northampton,	38,145	31,765	Easton.
Northumberland,	36,327	15,424	Sunbury.
Perry,		11,342	Tyrone.
Philadelphia city, }	111,200	137,097	Philadelphia.
Philadelphia co. }			
Potter,	29	186	Eulalia.
Pike,		2,894	Milford.
Schuylkill,		11,339	Orwigsburg.
Somerset,	11,284	13,974	Somerset.
Susquehanna,		9,960	Montrose.
Tioga,	1,687	4,021	Wellsborough.
Union,		18,619	New-Berlin.
Venango,	3,060	4,915	Franklin.
Warren,	827	1,976	Warren.
Washington,	36,289	40,038	Washington.
Wayne,	4,125	4,127	Bethany.
Westmoreland,	26,382	30,540	Greensburg.
York,	31,958	38,759	York.
Total,	810,091	1,049,398	

Face of the Country.] Several mountainous ridges traverse the central parts of the state from S. W. to N. E. all of which are commonly comprehended under the name of Alleghany or Appalachian mountains. The *Kittatinny* or *Blue mountains* come from Maryland, and passing through Franklin and Cumberland counties, cross the Susquehanna just above Harrisburg; after which they traverse Dauphin and Northampton counties, and then crossing Delaware river continue their course in the same direction through New-Jersey. West of the Kittatinny mountains are numerous inferior and parallel ridges, particularly near the southern boundary of the state, where the traveller meets successively with *Sideling hills*, *Ragged mountains*, *Great Warrior*, *Evit's* and *Will's mountains*. After these is the great *Alleghany ridge*, which, being the largest, gives its name to the whole range. It comes from Maryland, and runs from S. W. to N. E. through the centre of the state, dividing the waters which flow east into the Susquehanna from those which flow west into the Ohio. West of the Alleghany range, and parallel with it, are the *Laurel mountains* and the *Chesnut ridge*.—These mountains pass through the state like a broad belt and cover the southwestern, central, and northeastern sections. The northwestern and southeastern sections are either level or gently undulating.

Rivers.] The *Delaware* is the eastern boundary. It rises in the state of New-York, and pursues a zig-zag course resembling the letter W. It is navigable for ships of the line 40 miles, to Philadelphia. Its principal tributaries from this state are, the *Lehigh*, which rises in Luzerne county and runs into the Dela-

ware at Easton, after a southeasterly course of 75 miles, for 30 of which it is navigable; and the *Schuylkill*, which rises also in Luzerne county, and after a S. E. course of 120 miles, falls into the Delaware, opposite Mud island, 6 or 7 miles below Philadelphia.

The *Susquehanna*, one of the largest rivers in the United States, is formed by the union of two principal branches, the eastern and western. The eastern branch rises in Otsego lake, in the state of New-York, and running in a southwesterly direction into Pennsylvania, receives Tioga river near the northern boundary. It then flows, first S. E. and afterwards S. W. till at Northumberland it receives the western branch, which brings the waters of the central portion of the northern half of the state. After the union of the two branches, the course of the river is at first south and then S. E. till it falls into the head of Chesapeake bay near the N. E. corner of Maryland. During the last 50 miles of its course, the navigation of the river is obstructed by an almost continued series of rapids, but further up, to the union of the two branches, there is no obstruction which cannot be surmounted at a moderate expense. The navigation of the river is good for export trade, and immense quantities of lumber in the form of boards, scantling, shingles, &c. continually descend it to Baltimore.—The principal tributary of the *Susquehanna*, after the union of the two branches, is the *Juniatta*, which rises in the Alleghany ridge, and joins it 11 miles above Harrisburg, after an easterly course of about 180 miles.

The *Ohio* is formed by the union of the Alleghany and Monongahela rivers, which meet at Pittsburg in the western part of the state. 1. *Alleghany river* rises in the northern part of the state, and runs at first in a northwesterly direction into the state of New-York, and then by a bend to the S. W. again enters Pennsylvania, and pursues its course in a southerly direction till it joins the Monongahela. It is a steady stream, and navigable for keel boats of 10 tons to Hamilton, in New-York, 260 miles above Pittsburg. Its principal tributaries are *French creek*, which rises near lake Erie, and empties at Franklin, 80 miles north of Pittsburg; and *Toby's creek*, an eastern branch, which joins it 20 miles below Franklin. 2. The *Monongahela* rises in Virginia, and after a northerly course of 300 miles unites with the Alleghany at Pittsburg. It is navigable for large boats 60 miles, to Brownsville, and small boats proceed to Tygart's valley, 200 miles from the mouth of the river. Its principal tributary is the *Youghiogeny* rises in Virginia, and pursuing a northwesterly course pierces the Laurel mountains, where it descends the falls called the Obiopyle falls, after which it continues its course in a northwesterly direction till it joins the Monongahela 15 miles S. E. of Pittsburg.

Climate.] The climate of Pennsylvania is perceptibly more temperate than that of the New-England states. The winters are never so severe, and the summers are generally warmer. Snow lies on the ground but a short period in the winter, and

sleighs are but little used. This is, however, generally, a healthy country, and has but few peculiar diseases.

Soil and Productions.] A great portion of the state is good land, and much of it excellent. The richest tract is in the S. E. on both sides of the Susquehanna, comprising the counties of York and Lancaster, Franklin and Cumberland. This part of the state has long been settled, and is finely cultivated. The tract between lake Erie and Alleghany river has also a superior soil, but is as yet very thinly inhabited. Wheat is by far the most important agricultural product, and grows here to great perfection. The next in value is Indian corn. Rye, barley, buckwheat, oats, hemp and flax are also extensively cultivated.—The most important mineral is coal, which is found in abundance in the western part of the state. The country around Pittsburg, including 8 or 9 counties, is one great bed of coal, and the hills within sight of the town are full of that mineral. It is also found near the sources of the Lehigh and the Schuylkill. Iron ore also abounds in various parts of the state.

Chief Towns.] *Philadelphia*, the largest town in Pennsylvania, is on the west bank of Delaware river, which is here seven-eighths of a mile wide, 126 miles from the Atlantic ocean by the course of the bay and river, and about 55 or 60, in a S. E. direction, over land. The form of the ground plot of the proper city is an oblong, about one mile from north to south, and two from east to west, lying in the narrowest part of the isthmus between the Delaware and Schuylkill rivers, about 5 miles in a right line above their confluence. The buildings now extend beyond these limits, and occupy a space exceeding 3 miles in length from N. to S. and on High or Market street extend from the Delaware to the Schuylkill. All the houses built beyond the boundary line of the oblong city are said to be in the "liberties," as the jurisdiction of the corporation does not extend to that part of the town. Some of the streets in the liberties are irregular, but the city is regularly laid out in streets which cross each other at right angles. Of these, there were originally 9 which extended from the Delaware to the Schuylkill, and which were crossed by 23, running north and south. The number of squares in the original plan was 184, but as several of them have been intersected by new streets, their number now amounts to 304; Broad-street is 113 feet wide; High-street, 100; Mulberry-street, 60; and the other streets, in the original plan, 50 feet wide. The streets are paved with stones in the middle, and have neat foot paths of brick; and being furnished with common sewers and gutters, are, in general, kept very clean. Lamps, disposed at convenient distances, give light to all parts of the town in the night. The houses are generally constructed of brick, three stories high, plain and neat, without much ornament. The city is supplied with water from the Schuylkill by aqueducts, which distribute it to every part of the town.

Among the public buildings are, 1. The state house, which was erected about the year 1753, and is admired for its architec-

ture. It now contains Peal's museum, the largest collection of natural curiosities in America. 2. The new bank of Pennsylvania, erected under the superintendence of Mr. Latrobe; a large and remarkably elegant edifice of marble, of the Ionic order, constructed after the model of the ancient temple of Minerva in Greece. 3. The Pennsylvania hospital, which was established in 1751, and is the most respectable institution of the kind in the United States. It has a valuable anatomical museum, a library of nearly 5,000 volumes, and usually about 200 patients, of whom nearly one half are lunatics. In 1816, a handsome building was erected in the neighborhood of the hospital, to accommodate Mr. West's celebrated painting, representing Christ healing the sick. The profits resulting from the exhibition of the picture have afforded a handsome income to the hospital.

In 1817 there were 57 places for public worship; 16 for Presbyterians, 6 for Episcopalians, 6 for Friends, 5 for Baptists, 4 for Roman Catholics, 11 for Methodists, 2 for German Lutherans, 1 for Swedes, and one each for English Lutherans, German Presbyterians, Moravians, Universalists, Unitarians, Jews, and Swedenborgians.

Philadelphia is the first city in the United States in the variety, extent and excellence of its manufactures. The commerce is also very extensive. In amount of shipping it is the fourth city in the Union. The number of tons, in 1816, was 101,830. It imports foreign goods for the greatest part of Pennsylvania, for Delaware, and half of New-Jersey; and is contending with New-York, Baltimore, New-Orleans and Montreal for the supply of the western states.

The environs of Philadelphia are pleasant and well cultivated, and adorned with numerous country seats. Towards the north are Kensington, on the Delaware, well known for ship building; Germantown, a long and populous village, and Frankford another village, both within 4 or 5 miles. Population of the city and liberties, in 1790, 43,525; in 1810, 92,247, and in 1820, 108,416.

Pittsburgh is advantageously situated in a plain, between the Alleghany and Monongahela rivers, at the point where they unite to form the Ohio. By means of Alleghany river, and its branches, it has a water communication with the western part of New-York, and boats can approach within a few miles of lake Erie. By the Monongahela and a good turnpike road it is connected with Baltimore; and by the Ohio it has an easy intercourse with all the western states. It is also connected with Philadelphia by an excellent turnpike road. These advantages have made Pittsburgh the centre of a great commerce. At the same time all the country around the city is full of coal, and hence the city and its suburbs are admirably situated for such manufacturing establishments as require the use of fuel, and a great many such establishments have been erected. Here are 8 steam mills; 5 glass houses, in which every kind of glass, from a porter bottle or window pane to the most elegant cut crystal glass is manufactured, to the amount of 200,000 dollars annually;

4 air furnaces,; 3 breweries; numerous flour mills, potteries, forges, blast furnaces, rolling mills, slitting mills, distilleries and other mills and manufactories too numerous to be particularized. The population of the city and township, in 1820, was 11,629.

Lancaster is pleasantly situated, 62 miles west of Philadelphia, on the side of a hill, $1\frac{1}{2}$ mile west of Conestoga creek, which falls into the Susquehanna 9 miles S. W. of the town. Many of the inhabitants are of German origin, and speak the German language. There are 6 newspapers published in the town, 3 of which are in German. The surrounding country is fertile and highly cultivated, and the town has considerable trade. Population, in 1820, 6,633.

Harrisburgh, the capital of the state, is regularly laid out on the east bank of Susquehanna river, 33 miles N. W. of Lancaster, 97 W. N. W. of Philadelphia. The state has appropriated \$120,000 for the erection of a capitol, the two wings of which are already built. The space left between the wings is 320 feet. The site of the building is a plat of 10 acres, elevated 28 feet above the plain on which the town stands. Population, in 1820, 2,990.

Reading, the capital of Berks county, is a flourishing borough on the Schuylkill, 54 miles N. W. of Philadelphia. It is inhabited chiefly by Germans, and is famous for the manufacture of hats. Population, in 1820, 4,332. *Easton*, the capital of Northampton county, is pleasantly situated on the Delaware, at the mouth of the Lehigh, 53 miles north of Philadelphia, and contained, in 1820, 2,370 inhabitants. *Wilkesbarre*, the capital of Luzerne county, is on the eastern branch of the Susquehanna, 119 miles N. W. of Philadelphia. *Northumberland*, situated on the point of land formed at the junction of the two branches of the Susquehanna, is famous as the place of residence of Dr. Priestly during the last years of his life. *Sunbury*, the capital of Northumberland county, is 2 miles south of Northumberland, on the east side of Susquehanna river.

Carlisle, the seat of Dickinson college, is pleasantly situated 16 miles west of Harrisburg. Population, in 1820, 2,908. *York*, the capital of the county of the same name, is on Codorus creek, a branch of the Susquehanna, 22 miles W. S. W. of Lancaster. *Meadville*, the seat of Alleghany college, is on the east side of French creek, 25 miles from its mouth. It contained in 1820, 1,960 inhabitants.

Education.] The *University of Pennsylvania*, in the city of Philadelphia, was incorporated in 1791. It embraces the four departments of arts, medicine, natural science and law, in each of which lectures are given. There are four professors in the department of arts, 5 in that of natural science, 1 in the law department, and 7 in the medical department. The medical department is one of the most flourishing institutions of the kind in the world. It has about 500 students, from various parts of the United States.

Dickinson college, at Carlisle, was founded in 1783, and was, for a number of years, a flourishing institution, having a president, 3 professors, a complete philosophical apparatus, and a library of about 3,000 volumes. Its exercises, for several years, were suspended, but have recently been resumed. *Washington college*, at Washington, 26 miles S. W. of Pittsburg, was established in 1802, and had in 1817 a president, 2 professors, a library and philosophical apparatus, and about 100 students. The course of education is completed in three years. *Jefferson college*, at Canonsburg, 18 miles S. W. of Pittsburg, was established in 1802. It has a president, 2 professors, a library of about 1,000 volumes, a philosophical apparatus, and about 90 students. The course of studies is completed in 3 years. *Alleghany college* was founded at Meadville in 1815. A building was commenced in the summer of 1820 designed to accommodate 100 students. The library is valued at 6,000 dollars. The funds of the institution are yet small, but have been recently increased by a grant of 5,000 dollars from the Pennsylvania legislature. The Moravians have two flourishing schools at Bethlehem, on the Lehigh, 12 miles S. W. of Easton. They are in high repute, and receive many scholars from New-York and Philadelphia. One of the schools is for young ladies and the other for boys.

Roads.] There are excellent turnpike roads leading from Philadelphia in various directions. The principal is from Philadelphia through Lancaster to Pittsburgh. A diagonal road across the state from Philadelphia to the town of Erie on lake Erie is considerably advanced, and a road from Philadelphia through the eastern counties towards Sacket's harbor, on lake Ontario, is executed to the line of New-York. These are in fact military roads, the importance of which may be felt in future wars.

Canals.] A canal is now in progress connecting the Tulpehocken, which falls into the Schuylkill just above Reading, with the Swatara, which falls into the Susquehanna at Middletown. The obstructions to the navigation of the Schuylkill below the mouth of the Tulpehocken have been removed. The legislature of Pennsylvania have recently appropriated a large sum to the improvement of inland navigation.

Population.] The population, in 1790, was 434,373; in 1800, 602,545; in 1810, 910,091; and in 1820, 1,049,398, of whom 211 were slaves and 30,202 free blacks. The inhabitants are of several different nations. About one half are of English origin; one fourth, German; and an eighth, Irish. The remainder are Scotch, Welsh, Swedes, and Dutch. The great mass of the population is in the southern half of the state, particularly in the S. E. near the banks of the Susquehanna and Delaware rivers. The northern half of the state, in 1820, did not contain one fifth part of the population.

Language and Religion.] The language commonly spoken is the English; but the Germans, Dutch and Irish retain their own language, and many of them cannot speak English. Out of 84

newspapers published in the state a few years since, 15 were in the German language.—There are many different denominations of Christians in Pennsylvania. A few years since the Presbyterians, German Calvinists, German Lutherans, Friends, and Baptists had each nearly 100 congregations. Besides these, there are Methodists, Episcopalians, Scotch Presbyterians, Moravians, &c.

Government.] The legislative power is vested in a senate and house of representatives. The number of senators cannot be less than one fourth, nor greater than one third of the number of representatives. They hold their offices four years, and one fourth of them are elected each year. The number of representatives cannot be less than 60, nor more than 100, and they are chosen annually. The governor is elected for three years; but is not eligible more than 9 out of any 12 years.

Manufactures.] In value and variety of manufactures this is the first state in the Union. The value in 1810 was estimated at \$33,691,111. Pennsylvania has many advantages for a manufacturing state. Her numerous rivers abound with fine mill-seats, and the western parts of the state furnish inexhaustible stores of coal. In 1816 there were more than 5,000 improved mill-seats in this state.

Commerce.] Most of the foreign goods consumed in this state, Delaware, and the western part of New-Jersey, are imported at Philadelphia. Goods to an immense amount are also transported, in wagons from Philadelphia to Pittsburgh, and thence distributed through the western country. It is computed that 10 wagons, on an average, leave Philadelphia every day for Pittsburgh, loaded with merchandize; and the annual value of the goods thus transported, is estimated at \$18,000,000. In 1815, the amount of revenue paid from this state into the National Treasury was \$7,142,333, an amount greater than that of any state, except New-York. In amount of shipping Pennsylvania is the fifth state in the Union; the number of tons in 1816 was 102,474. The value of the exports from this state in 1820 was \$5,743,549, of which \$2,794,670 was foreign produce.

DELAWARE.

Situation and Extent.] Delaware is bounded N. by Pennsylvania; E. by Delaware river, Delaware bay and the ocean; S. and W. by Maryland. It extends from 38° 30' to 39° 45' N. lat. and from 74° 56' to 75° 40' W. lon. It is 87 miles long from N. to S. and from 10 to 36 broad. The area is estimated at 2,120 square miles.

Divisions.] The state is divided into 3 counties and 24 hundreds.

Counties.	Hundreds.	Pop. in 1810.	Pop. in 1820.	Chief towns.
Newcastle,	9	24,429	27,899	Wilmington, Newcastle.
Kent,	5	20,495	20,793	Dover.
Sussex,	10	27,750	24,057	Georgetown.
Total,	24	72,674	72,749	

Face of the Country.] The northern half of the county of Newcastle is hilly. The rest of the state is generally level and low. The height of land in the peninsula between Delaware and Chesapeake bays is in this state. It commences in Cypress swamp, which lies on the southern boundary, and as it proceeds north preserves a general parallelism with the coast of Delaware bay, at the distance of about 15 miles from it. Its progress in the two lower counties and a part of Newcastle is marked by a chain of swamps, from which the waters descend on each side to the Delaware and Chesapeake.

Soil and Productions.] The soil in the county of Newcastle consists of a strong clay; in Kent there is a considerable mixture of sand, and in Sussex, sand predominates. Wheat is the staple production. It grows here to very great perfection. Indian corn, rye, oats, &c. are also cultivated.

Rivers.] The *Delaware* is for a small distance the eastern boundary. *Brandywine* creek rises in Chester county, Pennsylvania, and running E. of S. 45 miles, passes by Wilmington, and falls into the Delaware 2 miles below. It abounds with fine mill-seats, the descent of the river being 300 feet in the course of 25 miles. *Christiana* creek rises on the confines of Maryland, and pursues an easterly course of 25 miles to the Brandywine, which it joins about a mile from its mouth. It is navigable for boats to Christiana bridge, 13 miles. *Duck* creek forms the boundary between the counties of Newcastle and Kent. Farther south are *Jones* creek, *Mother Kill*, *Mispyllion* creek, *Broad Kill* and *Indian* river.

Chief Towns.] *Wilmington*, the largest town in the state, is situated between Christiana and Brandywine creeks, about a mile above their confluence, 2 miles west of Delaware river and 28 S. W. of Philadelphia. The principal part of the town is situated on the S. W. side of a hill, which rises 109 feet above the tide, and is regularly laid out in streets crossing each other at right angles. On the N. E. side of the same hill, at a village on the Brandywine, separated by a short space from the rest of the town, are 14 flour mills, forming the finest collection in the United States. The Christiana admits vessels drawing 14 feet of water to the town, and those drawing 8 feet can ascend 8 miles further. The Brandywine has 7 feet of water to the mills. The town contains 2 market houses, a spacious almshouse, 3 banks, an academy, a United States arsenal, and 8 houses of public worship, 2 for Presbyterians, 2 for Episcopalians, and 1 each for Friends, Baptists, Roman Catholics and Methodists. Population, about 5,000.

Dover, the capital of the state, is on Jones' creek, about 5 miles from its mouth, and 48 south of Wilmington. It is regularly laid out in four streets, which intersect each other at right angles, leaving in the centre of the town a spacious square, on the east side of which is an elegant state-house. The town has a lively appearance, and carries on considerable trade with Philadelphia, chiefly in flour. The village contains more than 100 houses.

Newcastle is pleasantly situated on Delaware river, 5 miles south of Wilmington. It contains about 200 houses, and carries on considerable trade in wheat. *Christiana bridge*, on Christiana creek, at the head of navigation, drives a brisk trade with Philadelphia, in flour. *Lewistown*, on a small creek, 3 miles west of cape Henlopen, contains extensive salt works, in which salt is made from sea-water by the heat of the sun.

Population and Religion.] The population, in 1790, was 59,094; in 1800, 64,773; in 1810, 72,674; and in 1820, 72,749, of whom 4,509 were slaves and 12,958 free blacks. Presbyterians are the most numerous religious denomination. Several years since they had 24 congregations; the Episcopalians, 14; Friends, 8; Baptists, 7; and the Methodists were numerous in the two southern counties.

Government.] The legislature consists of a senate and house of representatives. The representatives are chosen annually; the governor and senators triennially. The governor can hold his office only three, out of any term of six years.

Manufactures and Commerce.] The Brandywine and Christiana abound with numerous excellent mill seats, which have been to a considerable extent improved, making Wilmington the centre of one of the most important manufacturing districts in the United States. In 1815, there were within 9 miles of the town 44 flour mills, 13 cotton manufactories, 15 saw mills, 6 woollen manufactories, 6 gunpowder mills, and several others. The whole value of the manufactures in 1810, was estimated at \$1,733,741. The principal article of export is flour. The value of the exports in 1820 was \$89,498.

MARYLAND.

Situation and Extent.] Maryland is bounded N. by Pennsylvania; E. by Delaware and the Atlantic; S. and W. by Virginia, from which it is separated by Potomac river. It extends from 38° to 39° 44' N. lat. and from 75° 10' to 79° 20' W. lon. The area is estimated at 13,959 square miles or 8,933,760 acres, of which one fifth is water.

Divisions.] Chesapeake bay runs through the state from north to south, dividing it into two parts. The part east of the bay is called the eastern shore, and the part west of the bay, the west-

ern shore. The state is divided into 19 counties; 11 of which are on the western and 8 on the eastern shore.

	Counties.	Pop. in 1810.	Pop. in 1820.	Slaves in 1820.	Chief towns.
Western shore.	St. Mary's,	12,794	12,974	6,047	Leonardtown.
	Charles,	20,245	16,500	9,419	Port Tobacco.
	Calvert,	3,005	8,073	3,668	St. Leonard.
	Prince George,	20,589	20,216	11,185	Upper Marlborough.
	Montgomery,	17,980	16,400	5,396	Montgomery C. H.
	Ann-Arundel,	26,668	27,165	10,301	Annapolis.
	Baltimore,*	75,310	96,201	10,388	Baltimore.
	Harford,	21,253	15,924	3,320	Bellair.
	Frederic,	34,437	40,459	6,685	Fredericktown.
	Washington,	18,730	23,075	3,201	Hagerstown.
Eastern shore.	Alleghany,	6,909	8,654	795	Cumberland.
	Cecil,	13,068	16,048	2,343	Elkton.
	Kent,	11,450	11,453	4,071	Chestertown.
	Queen Ann,	16,643	14,952	5,588	Centreville.
	Talbot,	14,230	14,389	4,748	Easton.
	Dorchester,	18,108	17,759	5,158	Cambridge.
	Somerset,	17,195	19,579	7,241	Princess Ann.
	Caroline,	9,453	10,103	1,574	Denton.
	Worcester,	16,971	17,421	4,551	Snow Hill.
Total,		380,546	407,350	107,398	

Face of the Country.] In the counties on the eastern shore of the Chesapeake, the land is generally level and low, and in many places is covered with stagnant waters, giving rise in the summer and fall months to agues and intermittent fevers. On the western shore the land below the lowest falls of the rivers is principally level and free from stones. Above these falls the country becomes successively uneven and hilly, and in the western part of the state is mountainous. The principal range of mountains is the Blue ridge or South mountains, which pass through the state in a northerly direction from Virginia into Pennsylvania. The extreme western part of the state is crossed by the Alleghany mountains. Between these and the Blue ridge are several inferior chains, as Will's mountain, Evi's, Warrior, and Ragged mountains, and Sideling hill, all of which pass into Pennsylvania.

Soil and Productions.] The soil is well adapted to the culture of tobacco and wheat, which are the staple productions of the state. Some cotton of inferior quality is also raised, and in the western counties considerable quantities of flax and hemp. Two articles are said to be peculiar to Maryland: the genuine *white wheat*, which grows in Kent, Queen Ann's and Talbot counties, on the eastern shore; and the *bright kite's foot tobacco*, which is produced on some parts of the western shore south of Baltimore. —Iron ore abounds in various parts of the state, and coal is found in inexhaustible quantities, and of a superior quality, on the Potomac, in the neighborhood of Cumberland.

Rivers.] The *Potomac* is the boundary between Maryland and Virginia from its mouth to its source. The *Susquehanna* termi-

* City and County.

nates its course in this state, and falls into the head of Chesapeake bay.

The principal rivers which fall into Chesapeake bay from the western shore are, 1. The *Patapsco*, which rises in the northern part of the state, and running in a southeasterly direction, discharges itself into Chesapeake bay between North point and Bodkin's point. It is navigable to Baltimore, 14 miles, for ships drawing 18 feet of water. About 8 miles above, at Elkridge landing, there are falls. 2. The *Severn*, a short river, which passes by Annapolis and falls into the Chesapeake 2 miles below. 3. The *Patuxent*, which rises about 30 miles west of Baltimore, and running in a southeasterly direction, discharges itself into the Chesapeake, about 15 miles north of the mouth of the Potomac, after a course of 110 miles. It is navigable for vessels of 250 tons to Nottingham, 46 miles, and for boats to Queen Ann. 14 miles farther.

The principal rivers which fall into Chesapeake bay from the eastern shore are, 1. *Elk river*, which rises in Chester county in Pennsylvania, and running in a southerly direction passes by Elkton, and discharges itself into Chesapeake bay 14 miles below. It is navigable to Elkton for vessels drawing 12 feet of water. 2. *Chester river*, which rises on the borders of Delaware, and running in a southwesterly direction passes by Chestertown, and falls into the Chesapeake 14 miles below. 3. The *Choptank*, the *Nanticoke*, the *Wicomico*, and *Pocomoke*, all of which rise in Delaware and pursue a southwesterly course.—The rivers in Maryland are generally very broad near their mouths and may be regarded, for some distance, as bays or arms of the Chesapeake.

Chief towns.] *Baltimore*, the largest town in Maryland, and in population the third in the United States, is built around a bay, which sets up from the north side of Patapsco river, and affords a spacious and convenient harbor. The strait which connects this bay with the river is very narrow, scarcely a pistol shot across, and is well defended by Fort M'Henry. A small river, called Jones' Falls, falls into the north side of the harbor, after dividing the city into two parts, called the town and Fell's point, which are connected by bridges. At Fell's point the water is deep enough for vessels of 500 or 600 tons, but none larger than 200 tons can go up to the town.

The city is generally well built. The houses are chiefly of brick; many of them are handsome, and some splendid. Among the public buildings are the State penitentiary, a theatre, a hospital, 10 banks and 31 houses of public worship, 5 for Roman Catholics, 5 for Episcopalians, 5 for Methodists, 4 for Presbyterians, 3 for Baptists, 2 for Seceders, 2 for Friends, and one each for Lutherans, Independents, Dunkers, Unitarians and Swedenborgians.

A marble monument to the memory of General Washington has been recently erected, on an elevation at the north end of Charles-street. The base is 50 feet square, and 23 feet high, and on it is another square of about half the extent and elevation. On this

is a lofty column, 20 feet in diameter at the base, and 14 at the top. On the summit of this column, 163 feet from the ground, the statue of Washington is to be placed.—The battle monument, erected to the memory of those who fell in bravely defending their city from the attack of the British on the 12th and 13th of September 1814, is a handsome structure of stone, situated on a large square in North Calvert-street.

Baltimore is well situated for commerce. It is connected by good turnpike roads with various parts of Pennsylvania, and with the navigable waters which run into the Ohio. It possesses the trade of Maryland, and of a great portion of the back country of Pennsylvania, and the Western states. In amount of shipping, it is the third city in the Union. The number of tons in 1815 was 101,960. The growth of the city has been remarkably rapid. In 1770 the population was only 300; in 1790, 13,508; in 1800, 26,514; in 1810, 46,555; and in 1820, 62,738, of whom 3,966 were slaves, and 10,325 free blacks.

Annapolis, the capital of the state, is 30 miles south of Baltimore, on the south bank of the river Severn, a small distance from its mouth. The state house is a noble edifice, and stands in the centre of the city. From this point the streets diverge in every direction, like the radii of a circle. The population of the city in 1820 was 2,260.

Fredericktown, the capital of Frederick county, is on a branch of Monocacy creek, 42 miles west of Baltimore. It is a flourishing town and carries on considerable trade with the back country. Population, in 1820, 3,640. Hagerstown or Elizabethtown, the capital of Washington county, is on the west bank of Antietam creek, 27 miles N. W. of Fredericktown. It contains about 300 houses, principally built of brick and stone. The trade with the western country is considerable. Cumberland, the capital of Alleghany county, is on the Potomac, at the junction of Will's creek.

Elkton, the capital of Cecil county, is situated at the forks of Elk river, 13 miles from its mouth. The tide flows up to the town, and there was formerly a brisk trade between Philadelphia and Baltimore through this place. Snow Hill, the capital of Worcester county, is on the Pocomoke, more than 20 miles from its mouth. It is a place of considerable trade, and in 1816 the amount of shipping was 7,364 tons.

Education.] There are several literary institutions in the city of Baltimore. A medical college was founded in 1807. In 1812 the institution was enlarged, and received a new charter. It is now styled the *University of Maryland*, and embraces the departments of languages, arts, sciences, medicine, law and divinity. The medical department has 6 professors, and is in a very flourishing state. There are no professors as yet in the other departments. *St. Mary's college*, also in Baltimore, has a valuable library, a chemical and philosophical apparatus, and about 150 students. *Baltimore college* has 2 instructors and about 60 students.

Canal.] A company was incorporated many years since by the states of Delaware and Maryland, for opening a communication

between Delaware bay and the Chesapeake by means of a canal from Christiana creek in Delaware to Elk river in this state. When completed it will be 22 miles long, and is intended for vessels of 70 tons. The expense is estimated at \$850,000.

Roads.] Excellent turnpikes proceed from Baltimore in various directions. There is a turnpike from Baltimore to Cumberland on the Potomac, a distance of 135 miles. From Cumberland to Brownsville on the Monongahela, in Pennsylvania, there is now completed by the U. States a free turnpike road of the most superior construction. The distance is 72 miles, making the whole distance from Baltimore to Brownsville 207 miles. The road has recently been continued from Brownsville to Wheeling on the Ohio. This is the shortest and best communication yet opened between the tide water of the Atlantic and the navigable western waters.

Population.] The population of the state in 1790 was 319,728; in 1800, 349,632; in 1810, 380,546; and in 1820, 407,350, of whom 107,398 were slaves and 39,730 free blacks. The slaves are most numerous in the southern half of the state, and in some of the counties they are more numerous than the whites, but in the counties which border on Pennsylvania, they form only one eighth part of the population.

Religion.] Maryland was originally settled by Roman Catholics, and they are still the most numerous denomination of Christians. The other denominations are Episcopalians, who had in 1811, 30 churches and 35 clergymen; Baptists, Friends, Presbyterians, &c.

Manufactures and Commerce.] Furnaces have been erected in various places for the manufacture of iron and iron ware. Glass, paper, and whiskey are also made in considerable quantities. The value of the manufactures in 1810, was \$11,468,794. The principal exports are flour and tobacco. The value of the exports for the year ending Sept. 30, 1820, was \$6,609,364, of which \$1,927,766 was foreign produce. Maryland is the third state in the Union in amount of shipping. In 1815 the number of tons was 156,062.

DISTRICT OF COLUMBIA.

Situation and Extent.] The district of Columbia is a tract of country, 10 miles square, on both sides of Potomac river, 120 miles in a direct line from its mouth. It was ceded to the United States by Maryland and Virginia in 1790, and in 1800 became the seat of the General government. It is under the immediate government of Congress.

Divisions. The District is divided into 3 cities or towns and 2 counties.

<i>Cities and Counties.</i>	<i>Pop.</i> <i>in 1810.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Free blacks</i> <i>in 1820.</i>
Washington city,	8,208	13,247	2,045	1,696
Alexandria city,	7,227	8,218	1,335	1,168
Georgetown,	4,948	7,360	1,526	894
Washington county,	2,315	2,729	1,049	168
Alexandria county,	1,325	1,485	422	122
Total,	24,023	33,039	6,377	4,048

Chief Towns.] WASHINGTON CITY, the metropolis of the United States, is pleasantly situated on the N. E. bank of the river Potomac, at the point of land formed by the junction of the Eastern branch, 300 miles from the mouth of the river, and 3 below the head of the tide. It is separated from Georgetown on the N.W. by Rock creek, and Tyber creek passes through the middle of the city. Washington is regularly laid out in streets running due north and south, intersected by others at right angles. Besides these streets, which are from 80 to 110 feet wide, there are avenues from 130 to 160 feet broad, which diverge from centres in various parts of the city, crossing the other streets transversely. At the points from which the avenues diverge are spacious squares. The ground embraced in the plan of the city is very extensive, but only a small portion of it is yet occupied with buildings.

The principal public buildings and establishments are, 1. *The Capitol*, which is finely situated on an eminence, commanding a view of every part of the city, and a considerable portion of the adjacent country. According to the original plan, it is to be composed of a central edifice and two wings. The two wings were in a state of considerable forwardness in 1814, when the British army under General Ross gained possession of the city and destroyed them, together with the President's house and other public structures and an extensive library which had been purchased for the use of Congress. The wings of the capitol are now rebuilt, and the central building has been commenced. The wings are each 100 feet square, and the whole building, when completed, will be a magnificent edifice, presenting a front of 362 feet. 2. *The President's house*, situated about a mile and a half west of the capitol, on the avenue leading to Georgetown. It is 170 feet by 85, and two stories high. 3. Four spacious brick buildings erected in the vicinity of the President's house, for the accommodation of the heads of the great departments of government. 4. *An extensive navy yard*, situated on the Eastern Branch, which forms a safe and commodious harbor. 5. *A fort*, which, from the extreme southern point of the land on which the city stands, commands the channel of the Potomac, and 6. *The general post-office*, a brick edifice, about a mile W. N. W. of the capitol.—The style of the architecture of the capitol is Corinthian, and that of the President's house, Ionic; and both buildings are constructed of free stone. The capitol square is inclosed by a strong and handsome iron railing; and being planted with trees, and otherwise

ornamented, will afford a delightful walk for the inhabitants and visitors of the city. The amount expended by the United States on the public buildings previously to their destruction by the British in August 1814, was \$1,214,291, and there have been appropriated towards rebuilding the same, \$1,207,788.

Besides the buildings and establishments above enumerated, Washington contains a city hall, a theatre, a college, 4 banks, several manufacturing establishments, and 12 houses for public worship, 3 for Presbyterians, 2 for Episcopalians, 2 for Baptists, 2 for Methodists, 2 for Catholics and 1 for Friends. There is a bridge about one mile long over the Potomac, three over the Eastern branch, and 2 over Rock creek. The population of Washington in 1800 was 3,210; in 1810, 8,208; and in 1820, 13,247, of whom 3,741 were blacks.

Alexandria is pleasantly situated on the west bank of the Potomac, 7 miles south of Washington. It has a commodious harbor, sufficiently deep for the largest ships, and is a place of extensive trade, especially in the article of flour. Population, in 1820, 8,218.

Georgetown is pleasantly situated on the east side of the Potomac, at the junction of Rock creek, which separates it from Washington city, 3 miles west of the Capitol. It contains a college and five houses of public worship, 2 for Episcopalians, 2 for Methodists, and one for Presbyterians. Population, in 1820, 7,360.

Education.] The *Columbian college* went into operation at the commencement of the year 1822. It has a president, 4 professors and 2 tutors. A large brick building has been erected for the accommodation of students, on the high ground north of the city of Washington, in a remarkably healthy situation, 8 miles from the capitol. A Baptist Theological seminary is to be connected with the institution.

The Roman Catholics have a college in Georgetown, established in 1799. It has 2 spacious brick edifices, finely situated, with a library of 7,000 volumes, and about 150 students. In 1815 it was raised by Congress to the rank of an university, and authorized to confer degrees.

VIRGINIA.

Situation and Extent.] Virginia is bounded N. by Pennsylvania; N. E. by Maryland; E. by the Atlantic; S. by North Carolina and Tennessee; and W. by Kentucky and Ohio, from the last of which it is separated by the river Ohio. It extends from 36° 30' to 40° 43' N. lat. and from 75° 25' to 83° 40' W. lon. The area is estimated at 64,000 square miles.

Divisions.] Virginia is divided into 102 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>
Accomack,	15,966	4,430	Madison,	8,490	4,612
Albemarle,	19,750	10,659	Mason,	4,868	593
Amelia,	11,104	7,400	Matthews,	6,920	3,186
Amherst,	10,423	5,577	Mecklenburg,	19,796	11,402
Augusta,	16,742	3,512	Middlesex,	4,057	2,166
Bath,	5,237	1,202	Monongalia,	11,060	375
Bedford,	19,305	5,177	Monroe,	6,620	501
Berkeley,	11,211	1,898	Montgomery,	8,733	1,255
Botetourt,	13,589	2,806	Morgan,	2,500	98
Brooke,	6,631	383	Nansemond,	10,494	4,526
Brunswick,	16,687	10,081	Nelson,	10,137	5,660
Buckingham,	17,569	9,939	New Kent,	6,630	3,759
Cabell,	4,789	392	Nicholas,	1,853	48
Campbell,	16,569	7,445	Norfolk,	15,478	5,924
Caroline,	18,008	10,999	Northampton,	7,705	3,323
Charles city,	5,255	2,967	Northumberland,	3,016	3,268
Charlotte,	13,290	8,124	Nottoway,	9,658	6,076
Chesterfield,	18,003	9,513	Ohio,	9,182	409
Colpeper,	20,944	9,468	Orange,	12,913	7,518
Cumberland,	11,023	6,813	Patrick,	5,089	1,213
Dinwiddie,	13,792	7,751	Pendleton,	4,846	381
Elizabeth city,	3,789	1,643	Pittsylvania,	21,323	8,484
Essex,	9,909	6,046	Powhatan,	8,292	5,476
Fairfax,	11,404	4,673	Preston,	3,422	80
Fauquier,	23,103	11,167	Prince Edward,	12,577	7,616
Fluvanna,	6,704	3,206	Princess Anne,	8,768	3,705
Franklin,	12,017	3,747	Prince William,	9,419	4,330
Frederick,	24,706	7,179	Prince George,	8,030	4,323
Giles,	4,521	307	Randolph,	3,357	131
Gloucester,	9,678	5,208	Richmond,	5,706	2,664
Goochland,	10,007	5,526	Rockbridge,	11,945	2,612
Grayson,	5,598	345	Rockingham,	14,784	1,871
Greenbrier,	7,041	786	Russel,	5,536	526
Greensville,	6,858	4,512	Scott,	4,263	258
Halifax,	19,060	9,882	Shenandoah,	18,926	1,901
Hampshire,	10,889	1,609	Southampton,	14,170	6,737
Hanover,	15,267	8,756	Spottsylvania,	14,254	7,724
Hardy,	5,700	914	Stafford,	9,517	4,368
Harrison,	10,932	569	Surry,	6,594	3,340
Henrico,	11,600	5,417	Sussex,	11,884	7,045
Henry,	5,624	2,178	Tazwell,	3,916	463
Isle of Wight,	10,139	4,297	Tyler,	2,314	100
James city,	3,161	1,677	Warwick,	1,608	954
Jefferson,	13,087	4,132	Washington,	12,444	1,908
Kenawha,	6,399	1,073	Westmoreland,	6,901	3,393
King and Queen,	11,798	6,041	Wood,	5,860	852
King George,	6,116	3,504	Wythe,	9,692	1,533
King William,	9,697	6,010	York,	4,384	2,165
Lancaster,	5,517	2,944	Richmond, city,	12,067	4,387
Lee,	4,256	366	Williamsburg, city,	1,402	783
Lewis,	4,247	115	Petersburg, town,	6,690	2,428
Loudoun,	22,702	5,729	Norfolk, borough,	8,478	3,261
Lunenburg,	13,746	7,560			
	10,662	6,663	Total,	1,065,366	425,153

Mountains.] The *Alleghany mountains* pass through the western part of the state from S. W. to N. E. dividing the waters which flow east into Chesapeake bay from those which flow west into the Ohio. The *Blue ridge* is east of the Alleghany range, and runs parallel with it, dividing the state into two parts nearly equal. Near the southern line of the state it bends westward, and unites with the Alleghany range. Its loftiest summits are the peaks of Otter, in Bedford county, the highest of which is 3,103 feet above the level of the sea, and is considered the most elevated point of land in Virginia. East of the Blue ridge, and parallel with it, at the distance of about 30 miles, is the *South mountain*. Between the Alleghany ridge and the Ohio there are also several ranges, irregular in their course, and less accurately known. The longest and most connected of these is the *Laurel ridge*. All these ranges continue their course in a northeasterly direction into Pennsylvania and Maryland. The *Cumberland mountains* form part of the boundary between Virginia and Kentucky.

Rivers.] The *Ohio* forms the boundary between Virginia and the state of Ohio. Its principal tributaries from this state are, 1. The *Big Sandy*, which forms part of the boundary between Virginia and Kentucky. 2. The *Great Kenhawa*, which rises in the western part of North Carolina, in the Alleghany mountains; and running north and northwest, joins the Ohio at Point Pleasant. About 100 miles from its mouth are the Great Falls, where the river descends perpendicularly 50 feet. The principal branch of the Kenhawa is *Greenbrier river*, which joins it 40 or 50 miles above the falls. 3. The *Little Kenhawa*, which joins the Ohio a little below Marietta, in the state of Ohio.

The *Potomac* rises in the Alleghany mountains, and during its whole course is the boundary between Virginia and Maryland. It falls into Chesapeake bay between Point Lookout and Smith's point by a mouth $7\frac{1}{2}$ miles wide, after a course of more than 500 miles. It is navigable for ships of the greatest burden, 300 miles, to the city of Washington, 3 miles below the head of the tide. Above that city there are numerous falls and rapids, which obstruct the navigation, the river descending more than 1000 feet in a distance of 200 miles. Canals have been dug around many of these falls, so that boats can now ascend above the mouth of the Shenandoah, 80 miles from the city of Washington. The *Shenandoah* is the principal tributary of the Potomac. It rises in Augusta county, near the centre of the state, and running in a N. E. direction, through a fertile country along the foot of the western declivity of the Blue ridge, joins the Potomac, after a course of about 200 miles, at Harper's ferry. Immediately after the junction of the Shenandoah, the Potomac bursts through the Blue ridge, presenting a scene which has been celebrated for its grandeur and magnificence.

The *Rappahannock* rises in the Blue ridge, and running in a S. E. direction about 130 miles, enters Chesapeake bay 30 miles below the mouth of the Potomac. It is navigable for vessels draw-

ing 10 feet of water to Fredericksburgh, 110 miles from its mouth. *York river* is formed by the union of the Mattaponi and Pamunkey, and runs in a S. E. direction to Chesapeake bay, which it enters about 30 miles below the mouth of the Rappahannock. It is navigable for the largest ships for more than 30 miles. *James river* rises in the Alleghany mountains, and after breaking through the Blue ridge, runs in a direction S. of E. and falls into the southern part of Chesapeake bay, after a course of more than 500 miles. It is navigable for sloops to Richmond, 150 miles from its mouth. At this city the navigation was formerly interrupted by the great falls, which in 7 miles descend 43 feet; but a canal around them is now completed, and the river has been rendered navigable 230 miles further for boats drawing 12 inches water. The principal tributary of James river is the *Appomattox*, which rises in Campbell county, and after an easterly course of 120 miles, joins it at City point. At Petersburg, 12 miles from its mouth, there are falls; but a canal has been dug around them, which has opened the navigation for 80 miles above that city. *Elizabeth river* is formed by the union of two branches at Norfolk, near the S. E. corner of the state, and falls into Hampton road, 8 miles below. At flood tide it has 18 feet water to Norfolk.

Face of the Country and Soil.] Virginia may be divided into four zones, essentially differing from each other in soil and aspect of the country. The *first* extending from the sea-coast to the termination of tide water at Fredericksburgh, Richmond, &c. is low and flat, sometimes fenny, sometimes sandy, and on the margins of the rivers composed of a rich loam, covered with a luxuriant and even rank vegetation. This zone has been formed by a comparatively recent alluvion; marine shells and bones are every where found near the surface of the earth. The *second* division extends from the head of tide water to the Blue ridge. The surface near tide water is level; higher up the rivers it becomes swelling; and near the mountains often abrupt and broken. The soil is divided into sections, of very unequal quality, parallel to each other, and extending across the state. The parallel of Chesterfield, Henrico, Hanover, &c. is a thin, sandy, and except on the rivers, an unproductive soil. That of Goochland, Cumberland, Prince Edward, Halifax, &c. is generally fertile. Fluvanna, Buckingham, Campbell, and Pittsylvania, again, are poor; and Culpeper, Orange, Albemarle, Bedford, &c. have a rich, though frequently a stony and broken soil, on a substratum of tenacious red colored clay. The scenery of the upper part of this section is highly picturesque and romantic. The *third* region is the valley between the Blue ridge and Alleghany mountains; a valley, which extends with little interruption, from the Potomac, across the state, to North Carolina and Tennessee; narrower, but of greater length than either of the preceding zones. The soil is a mould, formed on a bed of limestone, which often appears above the surface, in veins parallel to the mountains, and making every possible angle with the horizon. The

surface of this valley is sometimes broken by sharp and solitary mountains, detached from the general chain, the sides of which, nearly bare, or but thinly covered with blasted pines, form disagreeable objects in the landscape. The bed of the valley is fertile, producing good crops of Indian corn, wheat, rye, oats, buckwheat, hemp, flax, &c. The *fourth* and last division extends from the Alleghany mountains to the Ohio river, a country wild and broken, in some places fertile, but generally barren.

Climate and Productions.] The spring is short and inconstant in Virginia; the summer long, but not oppressive more than two months. In the low country, the months of August, September and October are unhealthy. Autumn, in the mountains, is the finest season of the year. In the middle parts of the state constant fires are required during five months; none at all for five others, and irregularly during the remaining two. The country often suffers from drought in summer and autumn.—The staple products of Virginia are wheat, Indian corn and tobacco. Tobacco is raised in much less quantities than formerly, while the cultivation of wheat has greatly increased.

Minerals and Mineral Springs.] Coal of a good quality is found within 20 miles of Richmond on James river. In the valley between the Blue ridge and the Alleghany range there are many inexhaustible mines of iron ore, of a fine quality. In the country west of the Alleghany mountains there are mines of lead, iron, coal and salt. Gypsum of a very good quality and in great abundance has also been found in Washington county. There are many mineral springs in Virginia. The hot and warm springs of Bath county, the sweet springs of Monroe, the sulphur springs of Greenbrier and of Montgomery, and the baths of Berkley county are much frequented. Indeed there is scarcely a county beyond the Blue ridge, which does not contain waters strongly impregnated with some mineral, besides lime which is common to them all.

Chief Towns.] *Richmond*, the metropolis of Virginia, is in Henrico county, on the north side of James river, immediately below the falls, and directly opposite Manchester, with which it is connected by two bridges. The situation is healthy, as well as highly picturesque and beautiful. A part of the city is built on the margin of the river; the rest upon Shockoe hill, which overlooks the lower part of the city, and commands an extensive and delightful prospect of the river and adjacent country.

Richmond is finely situated for a commercial and manufacturing town, being at the head of sloop navigation, on the falls of the river, and having an extensive back country, abounding with tobacco, wheat and coal. The canal around the Great falls commences about 7 miles above the city, and the whole descent to the basin on Shockoe hill is 43 feet. The basin is within the city, covering a space of several acres, and around it are coal yards, lumber houses and landing places for the produce brought down the river. The descent from the basin to tide water is about 50 feet, and is effected by 13 locks. The quantity of tobacco,

wheat, flour and coal brought down the river is immense: the value of the produce exported from Richmond and Manchester being estimated at \$8,000,000 annually. On the canal are numerous mill seats and manufacturing establishments.

Among the public buildings are the state house or capitol, the state prison, the Virginia armory and 8 houses of public worship, 2 for Episcopalians, 2 for Methodists, and 1 each for Presbyterians, Baptists, Friends and Jews. The growth of Richmond has been remarkably rapid. In 1783 the population was less than 2,000: in 1800, 5,739; in 1810, 9,735, and in 1820, 12,067.

Norfolk is situated near the S. E. corner of the state, in a low and marshy situation, on the east side of Elizabeth river, just below the confluence of its two branches, and 3 miles above its entrance into Hampton roads. The harbor is safe and commodious, deep enough for the largest vessels, and sufficiently spacious to contain 300 ships. It is defended by several forts; one of which is on Craney island, 5 miles below the town. Norfolk has more foreign commerce than any other place in Virginia, and in 1815 it was the seventh town in the U. States in amount of shipping, the number of tons being 31,628. A canal proceeds from the south branch of Elizabeth river, 9 miles above Norfolk, through Dismal swamp, to Albemarle sound; by means of which the produce of a large section of North Carolina is brought to the Norfolk market. Population, in 1820, 3,478.

Petersburg is situated on the S. E. bank of Appomattox river, just below the falls, 12 miles from its mouth, at the head of sloop navigation, 25 miles S. of Richmond. It carries on a large commerce in tobacco and flour, and is the emporium of trade for a considerable district in North Carolina, as well as for the southern part of Virginia. The falls of the river at this place afford fine situations for mills. Population, in 1820, 6,690.

Fredericksburg, one of the most flourishing towns in the state, is regularly laid out on the S. W. bank of Rappahannock river, 110 miles from its mouth. It is advantageously situated for trade, near the head of navigation on the Rappahannock, and in the midst of a fertile and well cultivated country. Vessels of 130 tons ascend as far as this place, and large quantities of corn, flour, tobacco and other produce are brought from the surrounding country for exportation. The annual value of the exports has been estimated at \$4,000,000. The town has rapidly increased within a few years. Population, between 3 and 4,000.

Lynchburg is on the south bank of James river, 20 miles below the falls, at which the river breaks through the Blue ridge. The commerce of the town extends to the western counties of Virginia, and the adjoining parts of Ohio, Kentucky, Tennessee, and Carolina. The productions of this fertile and very extensive back country are brought to Lynchburg, and carried down the river in batteaux to Richmond. The principal articles are tobacco, wheat, flour, hemp and provisions. The town has grown very rapidly. In 1793 it contained only 5 houses; in 1816, the population was estimated at more than 5,000.

Yorktown, on the S. side of York river, 11 miles from its mouth, at the point where the river is suddenly contracted to the width of a mile, has the best harbor in Virginia. This town will be ever famous in the American annals as the place where Lord Cornwallis and his army were captured, on the 19th of October, 1781. The city of *Williamsburg*, the seat of William and Mary college, and formerly the capital of the state, is situated 12 miles W. of Yorktown, and contained in 1820, 1,402 inhabitants. *Gosport*, on Elizabeth river, a mile and an half south of Norfolk, contains one of the United States' navy yards. *Jonestown*, on an island in James river, 32 miles from its mouth, was formerly a place of importance, but is now in ruins. *Staunton*, the capital of Augusta county, is nearly in the centre of the state, 120 miles N. W. of Richmond. *Mount Vernon*, the celebrated seat of General Washington, is pleasantly situated on the Potomac, 9 miles below Alexandria. *Monticello*, the seat of the Hon. Thomas Jefferson, is in Albemarle county, about 80 miles N. W. of Richmond. *Harper's Ferry* is on the Potomac, at the mouth of the Shenandoah. There is here an extensive establishment belonging to the United States for the manufacture of arms. The number of men employed is about 260, and the annual expense has been on an average \$100,000.

Education.] A literary fund has recently been created by the legislature, consisting of monies received from the United States for military services during the late war. It amounted in December 1818, to \$1,114,159, to which is to be added a balance still due from the United States. The interest of this sum, with the addition of the revenue arising from fines, forfeitures and escheats, which has also been appropriated to this object, will in the opinion of the Directors, yield an annual income little short of \$30,000. Of this sum, \$15,000 annually have been appropriated by the legislature to the support of primary schools, and \$15,000 to a university. The university is located at Charlottesville in Albemarle county. The plan contemplates 10 professorships; and the buildings, consisting of 10 pavillions for the professors, 5 hotels for dieting the students, and a sixth for the use of the proctor, with 104 dormitories, sufficient for lodging 208 students, are already finished in an elegant style of architecture. The sums expended upon the buildings have consumed all the income of the University for seven years in advance.

The college of *William and Mary* was founded at Williamsburg, in 1691, in the time of king William and queen Mary, who liberally endowed it. It flourished for many years after its establishment, but since the revolutionary war has greatly declined, and at one time was threatened with total extinction, but exertions have been recently made to revive it. The library contains between 3 and 4,000 volumes, and the philosophical apparatus is valuable. There are nominally 6 professorships, but only 3 or 4 are occupied. *Washington college*, in Lexington, the capital of Rockbridge county, 30 miles S. W. of Staunton, on a northern branch of

James river, is named after General Washington, who endowed it with 100 shares in the James river canal. It has a philosophical apparatus, a library of about 2,000 volumes, a president, 2 professors, and about 50 students. The canal shares have in some years produced an income of more than \$3,000. *Hampden Sidney college*, in Prince Edward county, had in 1821, a president, 2 tutors, and 101 students, of whom 15 were in the grammar school attached to the college.

Population.] The population, in 1790, was 747,610; in 1800, 886,149; in 1810, 974,622; and in 1820, 1,065,366, of whom 425,153 were slaves, and 34,690 free blacks. About three fourths of the population live east of the Blue ridge; and in this part of the state the slaves are very numerous, constituting in many counties the majority of the population; but in the counties west of the Blue ridge there are seven whites where there is one slave.

Character.] In respect to character, the Blue ridge divides the Virginians into two classes. Those east of the ridge are chiefly of English descent; those west of the ridge are descendants of the Scotch-Irish, that is, of emigrants from the north of Ireland. The former were originally Episcopalians, the latter Presbyterians. The people west of the mountains live chiefly by their own labor, and their general character is that of industry, frugality, temperance, shrewdness in their bargains, and perseverance in their undertakings. Their brethren in the eastern parts are supported by the labor of slaves. They are warm-hearted, hospitable, generous and fond of good cheer; inactive, except when stimulated by some strong passion; prompt to resolve, yet unsteady in the pursuit of their purposes. Wealth is very unequally distributed among them, yet the poor are less abject, and the rich less domineering and haughty, than perhaps in any country in the world where the difference of condition is so great.

Religion.] In 1817 the Baptists had 314 congregations in the state; the Presbyterians, 41 ordained ministers; and the Episcopalians, 34 ministers. There were besides many Methodists and Friends, and some Lutherans and Roman Catholics.

Government.] The legislative power is vested in a senate and house of representatives. The senate consists of 24 members, who are chosen for four years; one fourth being chosen yearly. The representatives are chosen annually, two from each county, and one from several cities and boroughs. The executive power is vested in a governor, who is chosen annually by joint ballot of both houses, and a council, consisting of 8 members. The governor can hold his office but 3 years in 7.

Revenue.] The ordinary revenue of Virginia amounts to about \$600,000, and is raised principally by a tax on land and slaves. The state has large funds appropriated to various public objects. Besides the literary fund, there is a fund for internal improvement, under the direction of a Board of Public Works,

which amounted in Nov. 1818, to \$1,537,561, and which has already promoted the construction of various canals. The Board have recently reported in favor of the practicability of a canal to connect James river with the Ohio.

Commerce and Manufactures.] The principal exports are wheat and tobacco. The value of the exports to foreign countries in 1820 was \$1,557,957, of which all except \$8,829 was domestic produce. The value of the manufactures in 1810 was estimated at \$15,263,473. The amount of shipping, in 1816, was 70,361 tons.

Natural Curiosities.] The *Natural bridge* over Cedar creek, in Rockbridge county, 12 miles S. W. of Lexington, is the most magnificent monument of the power of nature in Virginia. The river at this place runs through a gap or chasm, 90 feet wide at the top, and 250 feet deep, while the sides are almost perpendicular. The bridge is formed by a huge rock, from 40 to 60 feet thick, and in one place 60 feet broad, thrown completely across this chasm at the top. The vast dimensions of the bridge; its lofty, sublime, and even awful air, cannot be adequately recalled even by those who have seen it: only while we gaze upon its height and proportions can we feel the full effect of its beauty and grandeur.—The passage of the Potomac through the Blue ridge at Harper's ferry, forms a scene truly grand and magnificent.—The falling spring in Bath county is a beautiful cascade, streaming from a perpendicular precipice, 200 feet high. The volume of water, however, is too inconsiderable to produce a sublime effect.—There are many caverns in the calcareous parts of Virginia, but they are not thought worthy of a particular account.

NORTH CAROLINA.

Situation and Extent.] North Carolina is bounded N. by Virginia; E. by the Atlantic; S. by South Carolina; and W. by Tennessee. It extends from 33° 50' to 36° 30' N. lat. and from 75° 45' to 84° W. lon. The area is estimated at 48,000 square miles.

Divisions.] The state is divided into 62 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820</i>	<i>Slaves</i> <i>in 1820,</i>
Anson,	12,534	3,476	Carteret,	5,609	1,629
Ash,	4,335	250	Caswell,	13,253	5,417
Beaufort,	9,850	3,655	Chatham,	12,661	3,808
Bertie,	10,805	5,725	Chowan,	6,464	3,469
Bladen,	7,276	2,788	Columbus,	3,912	913
Brunswick,	5,480	2,334	Craven,	13,394	5,027
Buncombe,	10,542	1,042	Cumberland,	14,446	4,751
Burke,	13,411	1,917	Currituck,	8,098	1,854
Cabarras,	7,248	1,599	Duplin,	9,744	3,599
Calden,	6,347	1,749	Edgewood,	13,276	5,745

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>
Franklin,	9,741	4,709	Orange,	23,492	6,153
Gates,	6,837	2,685	Pasquotank,	8,008	2,616
Granville,	18,222	9,071	Perquimans,	6,857	2,465
Green,	4,533	2,174	Person,	9,029	3,664
Guilford,	14,511	1,611	Pitt,	10,001	4,241
Halifax,	17,287	9,450	Randolph,	11,331	1,060
Haywood,	4,073	274	Richmond,	7,537	2,021
Hertford,	7,712	3,244	Robeson,	8,204	2,099
Hyde,	4,967	1,580	Rockingham,	11,474	2,974
Iredel,	13,071	2,988	Rowan,	26,009	5,381
Johnson,	9,607	3,086	Rutherford,	15,351	3,371
Jones,	5,216	2,764	Sampson,	8,906	2,857
Lenoir,	6,799	3,355	Stokes,	14,033	2,204
Lincoln,	18,147	3,329	Surry,	12,320	1,365
Martin,	6,320	2,840	Tyrrel,	4,319	1,261
Mecklenburg,	16,895	5,171	Wake,	20,102	7,417
Montgomery,	8,693	1,815	Warren,	11,158	6,754
Moore,	7,128	1,296	Washington,	3,986	1,667
Nash,	8,185	3,445	Wayne,	9,040	3,162
New Hanover,	10,866	5,561	Wilks,	9,967	1,191
Northampton,	13,242	7,263			
Onslow,	7,016	2,777	Total,	638,829	205,017

Capes.] Cape Hatteras, in lat. $35^{\circ} 15'$ N. is a point running out from the middle of a long narrow sand island, which separates Pamlico sound from the ocean. *Cape Lookout* is south of Cape Hatteras, in lat. $34^{\circ} 22'$ N. *Cape Fear*, still farther south, in lat. $33^{\circ} 48'$ N. is remarkable for a dangerous shoal, called, from its form, the Frying pan.—All these capes are dangerous to mariners, particularly cape Hatteras, where numerous vessels have been shipwrecked.

Face of the Country.] Along the whole coast of North Carolina is a ridge of sand, separated from the main land, in some places by narrow sounds, in others by broad bays. The passages or inlets through it are shallow and dangerous, and Ocracoke inlet is the only one, north of cape Fear, through which vessels pass. In the counties on the sea coast the land is low, and covered with extensive swamps and marshes, and for 60. or 80. miles from the shore is a dead level. Beyond this, the country swells into hills and at length into mountains, the most western part of the country being traversed by the Alleghany and several parallel ridges.

Soil and Productions.] In the low country the soil is generally sandy, and except on the banks of the rivers, is not fit for cultivation; but it is covered with forests of pitch pine, which grows here to great perfection, and yields in abundance, tar, turpentine, boards and various kinds of lumber, which together form about half the exports of the state. In the swamps rice of a fine quality is raised; and in the upper country the soil produces in abundance, wheat, rye, barley, oats, hemp, tobacco and Indian corn.

Swamps.] Dismal swamp is a tract of marshy land, commencing in the S. E. part of Virginia and extending into North Carolina. It is 30 miles long from north to south and 10 broad, and embraces about 150,000 acres, generally covered with trees; in

the moist parts with juniper and cypress, and in those that are drier with white and red oak and several species of pines. In the centre is Drummond's pond, 15 miles in circumference. The Chesapeake and Albemarle canal passes through the swamp, and is supplied with water from Drummond's pond. *Alligator swamp* lies on the south side of Albemarle sound. Near the centre it contains a large lake, the waters of which have been partly drained off by a canal, and a great tract of land round the lake has thus been converted into excellent rice plantations.

Rivers.] The following are the principal rivers, beginning in the east. 1. The *Chowan* is formed by the Nottaway and Blackwater, which rise in Virginia and pursuing a southeasterly course unite on the Virginia line, and the Meherrin which falls in from the west 10 miles below. After their confluence, the Chowan runs in a S. E. direction, 40 miles, and falls into the head of Albemarle sound. 2. The *Roanoke* is formed by the Staunton and Dan, the former of which rises in the Alleghany mountains in Virginia, and the latter on the borders of North Carolina and Virginia. After their union near the southern boundary of Virginia, the river assumes the name of Roanoke, and flowing S. E. falls into the head of Albemarle sound near the mouth of the Chowan. It is navigable to Halifax, near the foot of the Great Falls, 75 miles by land from the mouth of the river, for vessels of 45 tons burden. At the great falls the river descends 100 feet in a distance of 12 miles; but a canal is now in progress around these falls, which will open the navigation for batteaux as far as the junction of the Dan and the Staunton. The Dan has been made navigable to Danville, and the Staunton is navigable for some distance for boats of 5 tons. The lands on the Roanoke are among the most productive in the United States. Their products for exportation may be estimated at \$2,500,000 annually, and when the full effect of the improvements in the navigation of the river is realized, will probably exceed \$5,000,000. At present a great portion of the produce is carried to Norfolk through the Dismal swamp canal, but efforts are now making by the North Carolinians to secure this trade to some port within the limits of their own state. 3. *Pamlico* or *Tar river* rises in Warren county, in the northern part of the state, and running in a S. E. direction for 180 miles falls into Pamlico sound at its western extremity. It is navigable for vessels drawing 9 feet of water to Washington, 40 miles, and for boats carrying 30 or 40 hogsheads to Tarborough, 50 miles farther. 4. The *Neuse* rises near Hillsborough in Orange county, and running in a S. E. direction for about 400 miles, falls into Pamlico sound at its S. W. extremity. It is navigable for sea vessels beyond Newbern, and for boats, to Smithfield, 160 miles from its mouth. 5. *Cape Fear river* is formed by Haw and Deep rivers, both of which rise in the northern part of the state, and running each about 90 miles in a S. E. direction, unite about 30 miles S. W. of Raleigh. The course of the river is thence E. of S. about 160 miles to the ocean, into which it discharges itself between Cape Fear island and Smithville. It is

navigable for sea vessels to Wilmington, 34 miles from its mouth, for large boats to Fayetteville, and for small boats above the forks. Its principal tributaries are, *Clarendon river*, or the N.E. branch, which unites with it just above Wilmington, and is navigable for 70 miles; and *Black river*, which joins it a few miles farther up. 6. *Yadkin river* rises in the Alleghany mountains, and running in a S. E. direction through Wilkes, Surry, Rowan, Montgomery, Anson and Richmond counties, passes into South Carolina. In Montgomery county are the narrows, where the river, which was before 200 or 300 yards wide, is contracted to 30. A few miles below the narrows it receives Rocky river from the west, and then takes the name of Great Pedee, which it preserves during the remainder of its course. This river was surveyed under the direction of the Yadkin Navigation company, in 1818, from Wilkes courthouse, in the mountains, to Cheraw Hill, about 6 miles below the South Carolina boundary, a distance of $247\frac{1}{2}$ miles. The expense of making it navigable for boats of ten tons through this distance, is estimated at \$250,234, exclusive of the narrows, where for the present it is intended to make a turnpike road for seven miles. 7. The *Catawba*, which rises in the western part of the state and passes into South Carolina, where it takes the name of Wateree. 8. *Broad river*, still farther west, which rises in the Alleghany mountains, and passes almost immediately into South Carolina.

Chief towns.] *Newbern*, the largest town in the state, is on a flat sandy point of land, at the junction of Neuse river with the Trent. It carries on considerable commerce, and contained, in 1820, 3,663 inhabitants.

Raleigh, the capital, is a beautiful town in Wake county. It is regularly laid out, and contained, in 1820, 2,674 inhabitants. The state-house is a beautiful building of brick, and has been recently adorned with a superb marble statue of Washington, executed in Italy by the first sculptor of the age.

Fayetteville is advantageously situated near the west bank of Cape Fear river, at the head of navigation for large boats, and is one of the most flourishing commercial towns in the state. Large quantities of tobacco, cotton, naval stores and other produce are brought to this place from the back country, and carried down the river to Wilmington, in boats containing about 120 barrels. The growth of Fayetteville has been very rapid. The population, in 1820, was 3,532.

Wilmington, on the east side of Cape Fear river, just below the junction of the N. E. branch, 34 miles from the sea, is the depot for the produce of a large section of North Carolina, and the exports from this port have usually been twice as much as from all the other ports of the state. The situation, however, is considered unhealthy, and vessels drawing more than 11 feet of water, cannot pass over the flats, formed 20 miles below the town, by the meeting of the tide waters with the current of the river. Population, in 1820, 2,633.

Edenton is at the head of a bay on the N. side of Albemarle sound, near the mouth of Chowan river. *Plymouth* is on the S. side of the Roanoke, 5 miles from Albemarle sound.

Education.] The *University of North Carolina*, at Chapel Hill, 27 miles W. of Raleigh, was incorporated in 1783, and has been liberally patronized by the state. In 1821 it had a president, 4 professors, 2 tutors and 146 Students.—At Salem, in Stokes county, there is an academy for young ladies, under the direction of the Moravians, which is in high repute, pupils resorting hither from all parts of the Southern states.—Within a few years there has been much zeal displayed in the establishment of academies and schools. Previous to 1804, there were but 2 academies in the state. The number at present is 50, and is rapidly increasing.

Internal Improvements.] Since the year 1815 the state has been zealously engaged in the business of internal improvements. It is intended to improve the navigation of the inlets and sounds, so as to open a direct and easy communication with the ocean; to remove the obstructions in the navigation of the principal rivers; to connect the rivers by navigable canals; to improve the roads; and to drain the marshes and swamps of the eastern and southern counties. In prosecution of these plans, skilful engineers have been employed for several years, in making the necessary surveys, and several private companies have been formed under the patronage of the state.

Population.] The population, in 1790, was 393,751; in 1800 478,103; in 1810, 555,500; and in 1820, 638,329, of whom 205,017 were slaves and 14,012 free blacks. The slaves are principally confined to the low country. The western parts of the state were settled by *Scotch-Irish* emigrants. Almost all the country between the Catawba and the Yadkin is thus peopled. The *Moravians*, in 1751, purchased a tract of 100,000 acres, lying between the head waters of the Yadkin and the Dan, and it now contains a number of flourishing villages.

Religion.] The Methodists and Baptists are the prevailing denominations, especially in the low country. The *Scotch-Irish* are Presbyterians, and there are also in the western parts of the state a few settlements of German Lutherans and German Calvinists.

Government.] The legislative power is vested in a general assembly, consisting of a senate and house of commons. The senators are chosen annually, one from each county. The members of the house of commons are chosen annually, two from each county, and one from each of the six principal towns. The executive power is vested in a governor, and a council of 7 persons, all of whom are chosen annually by a joint ballot of the two houses.

Commerce and Manufactures.] Most of the produce of North Carolina is exported from the neighboring states. Not a single point has yet been found on the coast, within the limits of the state, at which a safe and commodious port could be established.

Hitherto, the productions of the northern parts of the state, lying on the Roanoke and its branches, and also on the upper parts of the Tar and Neuse, have been sent to the markets of Virginia; and the trade of Broad river, the Catawba, and the Yadkin has gone to South Carolina. The principal exports are pitch, tar, turpentine, lumber, rice, tobacco, wheat and Indian corn. The value of the exports from the ports of North Carolina in 1820 was only \$808,319. The value of the manufactures in 1810 was estimated at \$6,653,152.

SOUTH CAROLINA.

Situation and Extent.] South Carolina is bounded N. and N. E. by North Carolina; S. E. by the Atlantic; and S. W. by Georgia, from which it is separated by Savannah river. It extends from 32° to 35° 8' N. lat. and from 78° 24' to 83° 30' W. lon. The area is estimated at 24,000 square miles.

Divisions.] The state is divided into 28 districts.

<i>Districts.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves.</i> <i>in 1820.</i>	<i>Districts.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves.</i> <i>in 1820.</i>
Abbeville,	23,167	9,615	Laurens.	17,682	4,879
Barnwell,	14,750	6,336	Lexington,	8,083	2,800
Beaufort,	32,199	27,339	Marion,	10,201	3,463
Charleston,	80,212	57,221	Marlborough,	6,425	3,033
Chester,	14,189	4,542	Newberry,	16,104	5,740
Chesterfield,	6,645	2,082	Orangeburgh,	15,653	3,827
Colleton,	26,404	21,770	Pendleton,	27,022	4,715
Darlington,	10,949	4,473	Richland,	12,321	7,627
Edgefield,	25,119	12,198	Spartanburgh,	16,939	3,303
Fairfield,	17,174	7,748	Sumpter,	25,639	16,143
Georgetown,	17,603	15,546	Union,	14,726	4,276
Greenville,	14,530	3,428	Williamsburgh,	8,716	5,864
Horry,	5,025	1,434	York,	14,936	4,590
Kershaw,	12,432	no return			
Laurens,	8,716	2,798			
			Total,	502,741	251,783

Face of the Country.] The sea coast is bordered with a fine chain of islands, between which and the shore there is a very convenient navigation. The main land is naturally divided into the Lower and Upper country. The low country extends 80 or 100 miles from the coast, and is covered with extensive forests of pitch pine, called pine barrens, interspersed with swamps and marshes of a rich soil. After leaving the low country, in proceeding into the interior, you first pass through a region of little sand hills, resembling the waves of the ocean in a high sea. This curious country, sometimes called the middle country, continues for 50 or 60 miles, till you arrive at the *Ridge*, which is a remarkable tract of high ground as you approach it from the

this place for boats of 70 tons, and there is a lively trade with the back country. Camden is remarkable for two battles fought here during the revolutionary war. *Winnborough*, on a branch of the Wateree, 30 miles N. N. W. of Columbia, is the seat of a college called Mount Zion college, which, however, is not at present in operation.

Education.] *South Carolina college* was founded in Columbia by the legislature in 1801, and is immediately under the patronage of the state. It has a president, 4 professors, 2 tutors, more than 100 students, a well selected library of 5,000 volumes, and a fine mathematical apparatus. Handsome brick buildings are erected for the accommodation of the president, professors and students. The legislature make an annual grant to the college of about \$10,000, and are perpetually extending to it a fostering hand.—There is a chartered college at *Beaufort*, with funds of 60,000 or 70,000 dollars, and a handsome edifice; but it is not provided with instructors in the studies of a collegial course, and does not confer degrees.

There are academies in various parts of the state, and the legislature annually appropriates \$30,000 for the support of free schools, which are established all over the state. The *South Carolina society*, formed in the year 1737, for the purpose of charitably educating poor children of both sexes, has a fund of \$137,000, and supports a school of upwards of 70 children, who are clothed as well as educated.

Internal Improvements.] There is a canal, 22 miles long, connecting Santee with Cooper river, by which the produce of a large section of this state, and of a part of North Carolina, is carried to the city of Charleston. It is 35 feet broad on the surface, 20 feet at the bottom, and 4 feet deep. The descent from the summit-level to the Santee is 35 feet, and is effected by 4 locks; the descent from the summit level to Cooper river is 68 feet, and is effected by 9 locks. The expense of the canal was \$650,667. The tolls do not exceed \$13,000.

Since the year 1818 the state has been zealously engaged in the business of internal improvements. A Board of Public works has been appointed, and the sum of one million dollars has been appropriated to the improvement of inland navigation. Canals are already completed around the falls at the mouths of Broad and Saluda rivers, and a communication is thus opened between Columbia and the fertile country on their borders.—Canals have also been commenced around the falls in the Wateree above Camden, by which the navigation will be opened into North Carolina, and with the aid of similar improvements, already commenced in that state, will be extended nearly to the sources of the river.—The *Waccamaw*, which joins the *Pedee* near its mouth, runs nearly parallel to the sea-coast, and is navigable for vessels of 150 tons to the distance of 80 miles. It is intended to unite this river by a canal with *Little river*, which discharges itself in North Carolina within the sea islands.—From *Georgetown* harbor, a canal, 5 miles long, has been commenced across the

toeque of land which separates it from the Santee. It is intended also to connect Ashley river with the Edisto by a canal 12 miles long; and considerable progress has already been made in a road through the state, from Charleston through Columbia, and thence towards Tennessee. In the report of the Board of Public works to the legislature for the year 1820, it is stated "that from the progress made, there is reason to believe that nearly all the improvements contemplated by the legislature, opening an inland navigation of more than fifteen hundred miles, will be completed in the year 1822, and within the sum pledged and set apart for internal improvements."

Population.] The population, in 1790, was 239,073; in 1800, 345,591; in 1810, 415,110; and in 1820, 502,741. Of the population in 1820, more than one half were slaves. The slaves are most numerous in the low country. In several districts on the coast there are four or five slaves to one white man, while in some of the districts in the upper country, there are four or five white men to one slave.

Religion.] The prevailing denominations are Baptists, Methodists, Presbyterians and Episcopalians. In 1811, the Baptists had 100 ministers and 130 churches; the Methodists, 26 travelling and upwards of 90 local preachers; the Presbyterians, between 80 and 100 congregations, under the care of about 40 ministers; the Episcopalians, 10 churches and 16 ministers; the Independents, 7 churches and 6 ministers. There were besides a few German and French Protestants, Quakers, Roman Catholics and Jews.

Government.] The legislature consists of a senate and house of representatives. The senate is composed of 43 members, chosen for four years, and the house of representatives of 124 members, chosen for two years, by districts. The governor is chosen every two years, by a joint ballot of both houses.

Commerce and Manufactures.] In 1820, South Carolina was the third state in the Union, in the value of her exports. The amount was \$8,882,940, and consisted almost entirely of domestic produce, a considerable portion of which was derived from North Carolina. The staple of the state is cotton. The other articles are rice, lumber, pitch, tar, turpentine, &c. This produce was exported principally in ships belonging to the merchants of the northern states. The amount of shipping belonging to South Carolina in 1815, was only 37,168 tons. Very little attention is paid to manufactures. The value of the manufactures in 1810, was estimated at only \$3,623,595.

Islands.] The sea-coast is bordered with a chain of fine islands, the most noted of which are *Sullivan's island*, *James island*, and *John's island*, bordering on Charleston harbor; *Edisto island*, lying S. W. of John's island, and about 40 miles from Charleston; and *Hilton head*, the most southern island in Carolina. Between these islands and the shore, there is a very convenient navigation for sea vessels of a small burden, from Georgia to North Carolina, interrupted only by the point of land between Santee river

and Winyaw bay, and the narrow isthmus between Waccamaw and Little rivers. Both these obstructions will be removed by the canals now in progress.

GEORGIA.

Situation and Extent.] Georgia is bounded N. by Tennessee ; N. E. by South Carolina, from which it is separated by Savannah river ; S. E. by the Atlantic ; S. by Florida, and W. by Alabama. It extends from 30° 20' to 35° N. lat. and from 81° to 86° 48' W. lon. It is 300 miles long from N. to S. and the area is estimated at 60,000 square miles, a considerable portion of which is still in the hands of the Indians.

Divisions.] The part of the state occupied by the whites is divided into 47 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>
Appling,	1,264	78	Laurens,	5,436	1,965
Baldwin,	7,734	3,042	Liberty,	6,695	5,037
Bryan,	3,021	2,238	Lincoln,	6,458	3,063
Bullock,	2,578	697	Madison,	3,735	904
Burke,	11,577	5,820	M'Intosh,	5,129	3,715
Camden,	4,342	2,095	Montgomery,	1,869	703
Chatham,	14,737	6,457	Morgan,	13,520	6,046
Clarke,	8,767	3,461	Oglethorpe,	14,046	7,336
Columbia,	12,695	7,420	Pulaski,	5,283	2,022
Earley,	768	216	Putnam,	15,475	7,241
Elbert,	11,788	5,159	Rabun,	524	15
Emanuel,	2,928	367	Richmond,	8,608	4,831
Effingham,	3,018	1,347	Scriven,	3,941	1,833
Franklin,	9,040	1,774	Tattnall,	2,644	568
Glynn,	3,418	2,760	Telfair,	2,104	646
Greene,	13,589	6,937	Twiggs,	10,640	3,462
Gwinnet,	4,589	538	Walton,	4,192	631
Habersham,	3,145	277	Warren,	10,630	4,041
Hall,	5,086	399	Washington,	10,627	3,898
Hancock,	12,734	6,863	Wayne,	1,010	333
Irwin,	411	39	Wilkes,	17,607	9,356
Jackson,	8,365	1,997	Wilkinson,	6,992	1,463
Jasper,	14,614	5,494			
Jefferson,	7,056	2,680			
Jones,	16,570	6,886	Total,	340,989	149,676

Face of the country, Soil and Productions.] From the ocean, for the distance of 7 miles, there is a margin of islands and marshes, intersected by rivers, creeks and inlets, communicating with each other, and forming an inland navigation for vessels of 100 tons, along the whole coast. These sea islands consist generally of a species of land called hammock, which produces

cotton of a superior quality. A narrow margin on the coast of the main consists also of hammock lands and salt marshes. Immediately back of this are the pine barrens, interspersed with numerous inland swamps. The rivers and creeks have also near their mouths marshy lands, called *brackish* swamps; and higher up, *river tide* swamps, which are entirely fresh. The pine barrens reach 60, and in some places 90 miles from the coast. Beyond this commences a country of sand hills, from 30 to 40 miles wide, interspersed with fertile tracts, and extending to the falls of the rivers. The part of the state above the falls of the rivers is called the Upper country, and has generally a strong fertile soil. Cotton is the principal production of Georgia. It is of two kinds, the *black seed*, or *sea island*, and the *green seed*, or *upland*. Rice is extensively cultivated in the swamps of the low country. The fruits are figs, oranges, melons, pomegranates, olives, lemons, &c. The forests afford fine timber, chiefly oak and pine, for exportation.

Climate.] The climate does not differ essentially from that of South Carolina. The winters are mild and pleasant. Snow is seldom or never seen, and vegetation is not often injured by severe frosts. Cattle subsist tolerably well through the winter, without any other food than what they obtain in the woods and savannas, and are fatter in that season than in any other. In the upper country the air is pure and salubrious throughout the year, and the water abundant and good. In the low country the inhabitants are subject to various disorders, arising partly from the badness of the water, which is generally brackish; and partly from noxious vapors, which are exhaled from the stagnant waters, and putrid matter, in the rice swamps. Savannah has heretofore been very unhealthy, on account of the large extent of lands in the vicinity devoted to the cultivation of rice: but in 1817, the inhabitants voted 70,000 dollars to the proprietors of these lands, as an inducement to abandon the wet cultivation and adopt the dry mode.

Rivers.] *Savannah river* separates Georgia from South Carolina on the northeast. The *Tennessee* just touches the state on the northwest; the *Chatahoochee* separates it from Alabama on the S. W. and the *St. Mary's* from Florida on the south.

The *Savannah* is formed by the union of the Tugaloo and Kiowee, both of which rise in the western part of North Carolina. The Tugaloo forms the boundary between South Carolina and Georgia from the parallel of 35° N. lat. till it unites with the Kiowee, after which the common stream under the name of Savannah river, runs in a S. E. direction, and meets the Atlantic in Tybee sound under lat. 32° N. It is navigable for large vessels to Savannah, 18 miles, and for boats, to the falls, at Augusta, 340 miles farther. Above the falls, boats can go 60 miles obstruction.

Ogeechee rises in Greene county, and running in a S. E. direction, passes by Georgetown and Louisville, and falls into Tybee sound, at Hardwick, 20 miles south of Savannah, after a course of about 200 miles.

The *Altamaha* is formed by the Oconee and Ocmulgee, both of which rise in the northern part of the state, and running in a direction E. of S. parallel with each other, for several hundred miles, unite at the southern extremity of Montgomery county. After their union the river runs in a S. E. direction about 100 miles, and discharges itself into the Atlantic by several mouths, 60 miles S.W. of Savannah. It is navigable for vessels of 30 tons as far as Milledgeville on the Oconee branch, 300 miles from the ocean. The bar at the mouth has 14 feet of water at low tide.

The *Satilla* discharges itself into the Atlantic under the parallel of 31° N. lat. opposite the northern extremity of Cumberland island, after an E. S. E. course of about 190 miles.—*St. Mary's* river, which, during its whole course, forms the boundary between Georgia and Florida, rises in Okefonoco swamp. It first takes a southerly direction for a considerable distance; then, after bending eastward, turns to the north, and proceeds as far as lat. $30^{\circ} 40'$. Its course is thence S. of E. for 60 miles, to the ocean, into which it discharges itself between Amelia and Cumberland islands. It has 21 feet of water on the bar at high tide, and is navigable for vessels drawing 14 feet of water for more than 70 miles.

The *Chatahochee* and *Flint* rivers unite at the S. W. extremity of the state to form the Appalachicola. The *Chatahochee* rises in the northern part of the state, near the head waters of the Savannah, and runs first in a S.W. direction almost to the western boundary; it then turns and pursues a course E. of S. till it meets *Flint* river. During the latter part of its course it forms the boundary between Georgia and Alabama. *Flint* river rises near the head waters of the Ocmulgee, and runs at first in a southerly and afterwards in a south-westerly direction through a fertile country for about 200 miles.

Swamp.] *Okefonoco swamp* lies partly in Georgia and partly in Florida. It is 180 miles in circumference, and gives rise to two rivers, the *St. Mary's*, which has already been described, and the *St. Juan* or *Suwaney*, which runs wholly in Florida. There are some spots of rich hammock land, and some pine barrens interspersed among the swampy tracts. The only inhabitants are alligators, snakes, frogs and musketoos. The number of these insects, and the large portion of poisonous vapor produced in warm weather, render it uninhabitable by any human being.

Chief Towns.] *Savannah* is on a high sandy bluff, 40 feet above low water mark, on the S. W. bank of Savannah river, 17 miles from the bar at its mouth. Vessels drawing 14 feet water can come up to the city. Larger vessels receive their cargoes 3 miles below. The city is regularly laid out in the form of a parallelogram, and contains 10 public squares, at equal distances from each other, inclosed and planted with trees. Many of the houses recently erected are splendid edifices. Among the public buildings are a hospital, theatre, 3 banks, and 10 houses of public worship. The city is the centre of commerce for a large extent of country. In nine months, ending June 30th

1817, produce was exported to the amount of \$9,966,503. Population, in 1820, 7,523, of whom 3,075 were slaves.

Augusta is on Savannah river, just below the falls; 127 miles N. W. of Savannah by land, 340 by water. It is well situated for commerce, and large quantities of produce are brought hither to be carried down the river to Savannah. It contains a theatre, an academy, a spacious city hall, 5 houses for public worship, and about 4,000 inhabitants.

Milledgeville, the capital of the state, is on the Oconee, 300 miles by water from the mouth of the Altamaha. The Oconee is navigable to this place for boats of 30 tons, and large quantities of cotton and other produce are brought here to be carried down the river. Population, in 1820, 2,069.

Sunbury is a pleasant and healthy town at the head of St. Catherine's sound, 49 miles S. of Savannah. *Darien* is on a high sandy bluff, on the north and principal channel of the Altamaha, 32 miles from the bar at its mouth, and 62 S. S. W. of Savannah. Owing to the rapid settlement of the country between the Oconee and Ocmulgee, it has risen within a few years to be a place of much importance. Exertions are now making to render this town the place of export for the produce of the rich back country with which it is connected. *Brunswick*, on the N. bank of Turtle river, 10 miles S. of Darien, has a fine harbor. *St. Mary's*, on the N. side of St. Mary's river, 9 miles from its mouth, has a good harbor, and contained, in 1820, 774 inhabitants.

Education.] The university of Georgia consists of a college, called Franklin college, established at Athens, 70 miles N. of Milledgeville, and of an academy, either established, or to be established in each county. This body of institutions is under the direction of a *Senatus Academicus*, consisting of the Governor and Senate of the state, and 15 trustees. The *senatus academicus* appoints a board of commissioners in each county to superintend the academy of the county, and the inferior schools. In 1817, \$200,000 were appropriated by the legislature for the establishment of free schools throughout the state.—*Franklin college* commenced operation in 1803. It has a president, 4 professors, 2 tutors, and about 80 students. Its funds are 100,000 dollars in bank stock, and 50,000 acres of land.

Population and Religion.] The population in 1790 was 32,548; in 1800, 162,686; in 1810, 252,433; and in 1820, 340,989, having increased more than fourfold in 30 years. Of the population in 1820, 149,676 were slaves, and 1,763 free blacks. The Baptists and Methodists are much the most numerous religious denominations.

Indians.] The western part of the state is in possession of the Indians, viz. the *Creeks* and the *Cherokees*. The Indian country lately embraced more than 40,000 square miles, or two thirds of the whole state; but by the treaty of Fort Jackson, the claim of the Creeks was extinguished to more than 11,000 square miles in the southern part of the state, including the whole country below the parallel of 31° 35', and a considerable district

the Coosa is interrupted by falls at the distance of 7 miles from its mouth. The principal tributary of the Alabama is the *Cahawba*, which joins it at the town of Cahawba, 160 miles below the forks of the Coosa and Tallapoosa.

The *Tombigbee* rises in the N. W. part of the state, and flowing in a southerly direction, near the western boundary, for about 450 miles, joins the Alabama to form the Mobile. It is navigable for boats to the mouth of the Tuscaloosa, its principal tributary. The *Tuscaloosa* or *Black Warrior* is navigable for boats to the falls, situated near lat. $33^{\circ} 15' N$.

Bay.] Mobile bay, at the mouth of Mobile river, is 30 miles long, and on an average 12 broad. It communicates with the gulf of Mexico, by two straits, one on each side of Dauphin island, which lies at its mouth. The strait on the west side will not admit the passage of vessels drawing more than 5 feet of water; that on the east side, between the island and Mobile point, has 13 feet of water, and the channel passes within a few yards of the point. There is a bar which runs across the bay near its upper end, over which there is only 11 feet of water.

Face of the Country, Soil and Productions.] A ridge of highlands divides the waters which fall into the Tennessee on the north from those which flow into the gulf of Mexico on the south. North of this ridge is a limestone region; south of it the whole country is alluvial. The soil is generally fertile, particularly on the banks of the rivers. The country bordering on Tennessee river, for the space of 100 miles east and west, and 40 from north to south, is regarded by some as the garden of North America. Thousands of emigrants from the neighboring states have resorted hither within a few years. Madison county, which lies in this region, 7 or 8 years ago was a mere wilderness. In 1820 it contained more than 17,000 inhabitants, and produced 15,000 bales of cotton or 4,500,000 pounds. Cotton is the staple production of the state, and the great article of export.

Chief Towns.] Mobile is on the western channel of Mobile river, near its entrance into Mobile bay, 33 miles north of Mobile point. It is built on a high bank, in a dry and commanding situation, but the approach to the town for vessels drawing more than 8 feet of water is difficult and circuitous. It formerly belonged to the Spaniards, but came into the possession of the United States in 1813, since which it has rapidly increased in population, and an attempt has been made to make it the depot for the produce of the rich and extensive country on the Tombigbee and Alabama rivers. There is, however, a vigorous rivalry between this place and Blakely.

Blakely is a new town, laid out in 1813, on the Tensaw or eastern outlet of Mobile river, 6 miles from its mouth, and 10 E. N. E. of Mobile. It has in some points a decided superiority over Mobile as an emporium for the commerce of the state. The same wind that enables a vessel to enter Mobile bay will carry her to the wharves of Blakely, which is not the case with Mobile. Another advantage is an open road to the rapidly improving

country on Alabama river. Vessels drawing 12 feet of water can enter the port at full tide.

St. Stephens is on the west side of Tombigbee river, 80 miles by land above Mobile. The river is navigable to this place for vessels drawing 4 feet of water. *Cahawba*, the seat of government, is situated at the junction of Cahawba river with the Alabama, 77 miles N. E. of St. Stephens. It was laid out in 1813. *Eagleville* is a French settlement, situated near the junction of the Black Warrior with the Tombigbee.

— *Huntsville*, the capital of Madison county, is situated near the head waters of Indian creek, 10 miles N. of Tennessee river. It is regularly laid out, and contains 150 dwelling houses, a court house, a bank, 2 printing offices, and 2 houses for public worship. Most of the cotton which is raised in Madison county is purchased here, and sent in wagons to Tennessee river, where it is shipped for New Orleans.

Forts.] *Fort Claiborne* is on the east side of Alabama river, at the head of schooner navigation, 60 miles above its junction with the Tombigbee, and 25 E. of St. Stephens. *Fort Jackson* is between Coosa and Tallapoosa rivers, about 3 miles above their junction. *Fort Stoddard* is on the west side of Mobile river, 44 miles from its mouth, at the head of sloop navigation.

Population.] Alabama has been but recently settled, and the population has increased with astonishing rapidity. In 1810, there were less than 10,000 inhabitants; in 1816, 29,683; in 1819, 70,594, and in 1820, 127,901, of whom 41,379 were slaves. The settlements at present are principally confined to the banks of the great rivers. The counties on the Tennessee contain more than one third of the whole population.

Indians.] The Indians formerly occupied the whole state, but their title has been almost extinguished by the government of the United States. The Cherokees, however, still own a large section in the N. E. part of the state; the Creeks occupy the country between Coosa river and the eastern boundary; and the Choctaws inhabit a considerable tract between the Tombigbee and the western boundary.

History.] Alabama and Mississippi formed a part of Georgia, till 1800, when they were separated from it, and established by act of Congress as a separate government, under the name of the Mississippi Territory. In 1817 Alabama was separated from Mississippi and became a territorial government, and on the 3d of March, 1819, was admitted into the Union as an independent state.

Education, Roads and Canals.] In the act of Congress admitting Alabama into the Union, two townships of land were granted to the state, for the support of a college; and one section, or thirty-sixth part, of every township, was given for the support of schools. Five per cent. of the net proceeds arising from the sale of the public lands within the state, were also appropriated to making roads and canals for the benefit of the state.

MISSISSIPPI.

Situation and Extent.] Mississippi is bounded N. by Tennessee; E. by Alabama; S. by the gulf of Mexico and Louisiana; W. by Louisiana and Arkansas territory. The boundary runs as follows: Beginning on the Mississippi river, at the point where the southern boundary line of the state of Tennessee strikes the same; thence east, along the said boundary line to the Tennessee river; thence, up the same, to the mouth of Bear creek; thence, by a direct line, in a southerly direction, to the N. W. corner of the county of Washington; thence, due south, to the gulf of Mexico; thence, westwardly, including all islands within six leagues of the shore, to the most eastern mouth of Pearl river; thence, up said river, to the parallel of 31° N. lat.; thence, west, along said parallel to the Mississippi river; thence, up the same, to the place of beginning. It extends from lat. $30^{\circ} 10'$ to 35° N. and from lon. $88^{\circ} 10'$ to $91^{\circ} 35'$ W. The area is estimated at 45,000 square miles.

Divisions.] About one half of the territory of this state, embracing the northern and north-eastern parts, is in the possession of the Chickasaw and Choctaw Indians. The part of the state belonging to the whites is divided into 17 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>
Adams,	12,076	7,953	Marion,	3,116	1,232
Amite,	6,853	2,833	Monroe,	2,721	522
Claiborne,	5,963	3,087	Perry,	2,037	491
Covington,	2,230	426	Pike,	4,438	994
Franklin,	3,821	1,535	Warren,	2,693	1,237
Green,	1,445	380	Wayne,	3,323	1,065
Hancock,	1,594	321	Wilkinson,	9,718	5,761
Jackson,	1,682	321			
Jefferson,	6,822	3,635	Total,	75,448	32,814
Lawrence,	4,916	991			

Rivers.] The Mississippi forms the western boundary from lat. 31° to lat. 35° N. Its principal tributaries are, 1. The Yazoo, which rises near the northern boundary of the state, and pursuing a S. W. course, runs into the Mississippi, 12 miles above the Walnut hills and 100 above Natchez. It is navigable 100 miles. 2. *Big Black river*, which empties itself 50 miles above Natchez, after a S. W. course of 170 miles, for 70 of which it is navigable. 3. The *Homochitto*, which joins the Mississippi a little above Fort Adams, after a S. W. course of 70 miles. For about 15 miles from its mouth, the banks of the Homochitto are annually overflowed. 4. *Buffalo river*, which falls into the Mississippi at Loftus' heights, 2 miles above Fort Adams.

The principal rivers in the southern part of the state, are, 1. The *Amite*, which rises in the county of the same name, and pursues a southerly course into the state of Louisiana. 2. *Pearl*

river, which rises near lat. 33° N. and pursuing a southerly course, discharges itself through several mouths into the Rigolets, or channel of communication between lake Pontchartrain and lake Borgne. Below lat. 31° it forms the boundary between Mississippi and Louisiana. 3. The *Pascagoula* or *Chickasawhay* river, which runs into a bay of the gulf of Mexico, 38 miles west of Mobile bay, after a southerly course of 200 miles. It is navigable for vessels drawing 6 feet of water 50 miles, and for boats, 100 miles farther, but the bay at its mouth is too shallow to admit vessels drawing more than 4 feet of water.

Face of the Country, Soil and Productions.] The southern part of the state, for about 100 miles from the gulf of Mexico, is mostly a flat country, with occasional hills of moderate elevation, and is covered with forests of the long leaved pine, interspersed with cypress swamps, open prairies and inundated marshes. As you proceed farther north, the country becomes more elevated and agreeably diversified, and the soil is a deep, rich mould. The Indian country is very fertile. On the Mississippi, between the mouth of the Yazoo and the southern boundary of the state, there are extensive bottom lands, occupying a surface of about 600 square miles, liable to annual inundation. From these low lands the country rises into hills, and for 10 or 15 miles towards the interior, presents a warm and waving soil, generally composed of rich loam, and admirably adapted to the cultivation of cotton. The price of land is very high in this part of the state, and immense profits have been realized by the cotton planters. The sugar cane is sometimes planted as high up as Natchez, but not with the same success as is experienced farther south. Tobacco and indigo were formerly extensively cultivated, but since the introduction of cotton, they have been almost abandoned. The flour and grain used in the settlements on the Mississippi are principally brought from Kentucky.

Climate.] The climate is temperate, and in the elevated parts of the state, generally healthy. The bay of St. Louis on the southern border, is esteemed one of the most salubrious places in that climate, and is the retreat of many of the citizens of New-Orleans during the sickly season.

Chief Towns.] The city of *Natchez* is in Adams county, on the E. bank of Mississippi river, more than 300 miles above New-Orleans by the course of the river, and 166 by land. The greater part of the town stands on a bluff, upwards of 150 feet above the surface of the river. Business is transacted principally at the bottom of the bluff, on the margin of the river, where there is a convenient landing place. The country around Natchez consists of excellent cotton lands, and is laid out in extensive plantations. The income of many of the planters is from 5,000 to 30,000 dollars per annum. The town contains a court house, a bank, with a capital of 3,000,000 dollars, and 2 houses of public worship, 1 for Roman Catholics and 1 for Presbyterians. Population, in 1820, 2,184.

Monticello, the capital of the state, is a new town, in Lawrence county, on Pearl river, 90 miles E. of Natchez. *Washington* is

a flourishing town, 6 miles E. of Natchez. *Shieldsborough*, in Hancock county, on the bay of St. Louis, 40 miles N. E. of New-Orleans, is a pleasant and healthy settlement, and is much resorted to by the citizens of New-Orleans during the hot months.

Population.] The population in 1810, was 31,306; in 1816, 44,208; and in 1820, 75,448, of whom 32,814 were slaves. More than half the population is in the counties bordering upon the Mississippi, between the mouth of the Yazoo and the southern boundary, on a territory of about 2,500 square miles.

Indians.] The country of the Choctaws lies principally in this state, but partly in Alabama. It extends from the Tombigbee to Mississippi river, and is watered by the Yazoo, Big Black and Pearl rivers, in the upper part of their course. The number of the Choctaws is estimated at 20,000. Within a few years they have made great advances in civilization. They raise corn, cotton and a great many cattle, and often appear clad in garments of their own manufacture.

In 1818 the American Board of Commissioners established a mission among these Indians, which has been prospered beyond the most sanguine expectations. The primary seat of the mission is at *Elliot*, on the Yalo Basha creek, about 30 miles above its junction with the Yazoo, and 275 by water from Natchez; but another establishment, called *Mayhew*, has been recently made on Ook-tib-be-ha creek, 12 miles above its junction with the Tombigbee. School houses have been established at various other places. The Choctaws have from the beginning manifested the most friendly dispositions towards the mission; and have recently proved their sincerity by unequivocal evidence. At a treaty, held in 1816, they sold a portion of their country to the United States, for which they are to receive \$6,000 annually, in cash, for 17 years. The whole of this sum they have voted to appropriate to the support of schools, under the direction of the American Board. The government of the United States has also extended its patronage to the mission. The expenses of erecting a school house and dwelling house, at each of the establishments, have been defrayed from the National treasury, and \$1,000 a year has been allowed to the establishment at Elliot.

Government.] Mississippi was admitted into the Union as an independent state in 1817. The legislative power is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen annually, and cannot be less than 24 nor more than one hundred in number. The senators are chosen for three years, and their number cannot be less than one fourth nor more than one third of the house of representatives. The executive power is vested in a governor, who is chosen by the people for two years.

Education.] Jefferson college, in Washington, near Natchez, was incorporated in 1802, and an edifice, 170 feet by 40, has been erected for the accommodation of students. Another college was established at Shieldsborough, in 1813.

Roads and Canals.] The act of Congress admitting this state into the Union appropriates, on certain conditions; which have since been complied with, five per cent. of the net proceeds of the sale of public lands, lying within the state, to making roads and canals.

LOUISIANA.

Situation and Extent.] Louisiana is bounded N. by Arkansas territory; E. by the state of Mississippi; S. by the gulf of Mexico; and W. by Mexico or New-Spain. The boundary runs as follows: Beginning in Mississippi river at 33° N. lat. it proceeds down the river to lat. 31° N.; thence, along that parallel, to Pearl river; down Pearl river to the gulf of Mexico; along the gulf of Mexico, including all the islands within six leagues of the shore, to the mouth of the Sabine; up the Sabine to the parallel of 32° N. lat. thence, due N. to the parallel of 33°; thence, east, along that parallel to the place of beginning. It extends from lat. 29° to 33° N. and from lon. 89° to 94° W. The area is estimated at 48,220 square miles, or 30,860,800 acres.

Divisions.] Louisiana is divided into 24 counties and parishes.

Counties and Parishes.		Pop. in 1810.	Pop. in 1820.	Slaves in 1820.
Northern Section.	Natchitoches, county,	2,870	7,486	2,326
	Ouachita, parish,	1,077	2,896	836
	Rapide, parish,	2,300	6,065	3,489
	Catahoula, parish,	1,164	2,287	751
	Concordia, parish,	2,875	2,626	1,787
	Avoyales, parish,	1,109	2,245	782
	Plaquemine, parish,	1,549	2,354	1,566
	Orleans, parish, *	21,552	41,351	14,946
	St. Bernard, parish,	1,020	2,635	1,923
	St. Charles, parish,	3,291	3,862	2,987
S. E. Sec- tion.	St. John Baptist, parish,	2,980	3,854	2,209
	St. Jaques, parish,	3,955	5,660	3,086
	Ascension, parish,	2,219	3,728	2,129
	Assumption, parish,	2,472	3,576	1,149
	Lafourche interior, parish,	1,995	3,755	968
	Iberville, parish,	2,879	4,414	2,279
	West Baton Rouge, parish,	1,463	2,335	1,303
	Point Coupee, parish,	4,539	4,912	3,630
	Feliciana, parish,		12,732	7,164
	East Baton Rouge, parish,		5,220	2,076
	St. Helena, parish,	10,000†	3,026	830
	Washington, parish,		2,517	559
	St. Tamany, parish,		1,723	631

* Including the city of New-Orleans.

† These five parishes formed a part of West Florida in 1810.

S. W.	{ Attakapas, county,	7,369	12,063	5,707
Section.	{ Opelousas, county,	5,048	10,085	3,951
Total,		36,536	153,407	69,064

Name.] The whole country between Mississippi river and the Pacific ocean, now belonging to the United States, was once owned by France, and was called Louisiana, in honour of Louis XIV. In 1803 this country was purchased by the United States from France, for about \$15,000,000. It has since been divided into 4 parts, viz. 1. The state of Louisiana. 2. The state of Missouri. 3. Missouri territory. 4. Arkansas territory. The name, *Louisiana*, is now applied only to the first of these divisions.

Rivers.] The *Mississippi* forms the eastern boundary of the state from 33° to 31° N. lat. Near lat. 31° it receives Red river from the N. W. after which, instead of receiving the tribute of inferior streams, it divides into numerous branches or outlets, which diverging from each other, slowly wind their way to the sea, forming what is called the Delta of the Mississippi. Of these outlets, the most western is the *Atchafalaya*, which leaves the main stream 3 miles below the mouth of Red river, and diverging westward, flows into Atchafalaya bay, in the gulf of Mexico. About 130 miles below the Atchafalaya, is the outlet of the *Plaquemine*. Its main stream unites with the Atchafalaya, but it has other communications intersecting the country in different directions. Thirty-one miles below the Plaquemine, and 81 above New-Orleans, is the outlet of *La Fourche*, which communicates with the gulf of Mexico by several mouths. Below the La Fourche, numerous smaller streams branch off from the river at various points. On the east side of the Mississippi, the principal outlet is the *Iberville*, which, leaves the main stream about 100 miles below the mouth of Red river, and running in an easterly direction, receives the Amite from the north, and discharges itself into lake Maurepas. Lake Maurepas discharges itself into lake Pontchartrain; lake Pontchartrain, into lake Borgne; and lake Borgne into the gulf of Mexico. The *Iberville* is navigable three months in the year for vessels drawing 3 or 4 feet of water, but during the rest of the year it is entirely dry from the Mississippi to the mouth of Amite river.

The principal tributary of the Mississippi is *Red river*, which joins it in lat. $31^{\circ} 5' N.$ It enters the state near the N. W. corner in one undivided stream, and after flowing in a southerly direction about 30 miles, spreads out into a number of channels and lakes, forming an inundated swamp, six miles wide and 50 long. This overflowed tract in Red river may be regarded as the commencement of its delta, as the river never again unites in one continuous stream. The navigation of the river is interrupted at a place called Rapide, 135 miles from its mouth, by a ledge of rocks, and further up many parts of the channel are choked with trees. The principal tributary of Red river is the *Ouachita* or *Wachitta* which rises in Arkansas territory, and

flowing south into Louisiana, joins Red river 23 miles from its mouth. About 30 miles above its union with Red river it is joined by the Tensaw and Catahoula, and after their junction, it usually takes the name of Black river. The Ouachita can be ascended in boats 600 miles.

The principal rivers east of the Mississippi are, the *Amite*, which rises in the state of Mississippi, and running in a southerly direction, joins the Iberville, 40 miles above its entrance into lake Maurepas; and *Pearl river*, which also rises in the state of Mississippi, and running in a southerly direction, discharges itself into the Rioglets, or channel of communication between lake Pontchartrain and lake Borgne, after forming for some distance the boundary between the states of Mississippi and Louisiana.

The principal rivers west of the Mississippi are, the *Teche*, which rises near the centre of the state, and running in a S. E. direction, joins the Atchafalaya, about 15 miles above its entrance into the gulf of Mexico; the *Vermillion*, which is west of the *Teche*, and discharges itself into Vermillion bay; the *Mermentau* and *Calcasieu*, which run into the gulf of Mexico, west of the Vermillion; and the *Sabine*, which rises in the Spanish province of Texas, but from lat. 32° to its mouth forms the western boundary of Louisiana. The Mermentau, the Calcasieu and the Sabine, before entering the gulf of Mexico, spread out into broad lakes, and then contract again into narrow rivers.

Face of the Country.] Along the whole southern border of the state, from Pearl river to the Sabine, are vast prairies, which for every purpose of a general sketch, may be described as one immense meadow, occupying 10,000 square miles, or one fifth of the surface of the state. The part of this tract about the mouths of the Mississippi, for 30 miles, is one continued swamp, destitute of trees, and covered with a species of coarse reed, 4 or 5 feet high. Nothing can be more dreary than the prospect from a ship's mast, while passing this immense waste.—The northern and central parts of the state have been but recently explored, and are as yet very imperfectly known.

A large extent of country in this state is annually overflowed by the Mississippi. From lat. 32° to 31° the average width of the overflowed land may be estimated at 20 miles; from lat. 31° to the efflux of the La Fourche, a little above lat. 30° , the width is about 40 miles. All the country below the La Fourche is overflowed. The whole extent of lands thus inundated is 8,340 square miles; and if to this be added 2,550 square miles for the inundated lands on Red river, the whole amount in the state will be 10,890 square miles. It must not be imagined, however, that this extensive tract is one continued sheet of water. It is rather intersected by innumerable canals and lakes, which, interlocking in a thousand mazes, chequer the whole face of the country. The area actually submerged is estimated at only 4,000 square miles. It is remarkable that the banks of the Mississippi, and several of its branches, are considerably elevated above the level of the adjacent country. This is occasioned by a more copious deposi-

tion of mud along the margins of the rivers than at a distance from them. Hence it happens that all these rivers are skirted with a rich border of alluvial land, from 400 yards to a mile and an half in breadth, while the surface in the rear is covered with lakes and impassable swamps.

Levees.] The fertile tracts of alluvial land, which everywhere border the shores of the Mississippi, have given rise to an artificial work of great extent, for confining its stream, and for securing the country from the effects of its inundations. This work is an embankment on the margin of the river, called the *Levee*. It is usually about 5 feet high, and 12 at the base, with sufficient width at the top for a foot path. As there is no stone to be had, the only material used is a soft clay with cypress staves placed next the river, and the whole covered with earth, and sodded. Every individual is required to keep up the levee in front of his own land, and before the season of high water, it is inspected by commissioners appointed for the purpose in each parish. During the continuance of the floods the levees demand the most vigilant attention; they must be continually watched, and all hands are often drawn from the fields to guard them for whole days and nights.

A *crevasse* is a breach formed in the levee by the waters of the river in time of inundation. A *crevasse*, says Mr. Brackenridge, "rushes from the river with indescribable impetuosity, and with a noise like the roaring of a cataract, boiling and foaming, and tearing every thing before it. When a *crevasse* occurs, the inhabitants, for miles above and below, instantly abandon every employment, and hasten to the spot, where every exertion is made, day and night, to stop the breach, which is sometimes successful, but more frequently, the hostile element is suffered to take its course. The consequences are, the destruction of the crop and the buildings, and sometimes the land itself is much injured, the current carrying away the soil, or leaving numerous logs and trees, which must be destroyed before the land can again be cultivated."

On the east side of the Mississippi, the embankment commences about 60 miles above New-Orleans, and extends down the river for more than 130 miles. On the west shore it commences at Point Coupee, 172 miles above New-Orleans. It is here that the navigator in descending the river emerges from a gloomy wilderness, presenting detached settlements at long and tedious intervals, into beautiful and finely cultivated plantations. On the side of this elevated, artificial bank, is a range of neatly built houses, appearing like one continued village as far as the city of New Orleans.

Soil and Productions.] The parts of the state which have been brought under cultivation are almost exclusively the narrow strips of rich alluvial land on the banks of the Mississippi, the Teche, Red river, and Ouachita. The staple productions are cotton, sugar, and rice. Tobacco and indigo could be as extensively cultivated as cotton, but they do not afford the same profit. On the banks of the Mississippi, La Fourche, the Teche and the

Vermillion, below lat. $30^{\circ} 12' N.$ wherever the soil is elevated above the annual inundation, sugar can be produced; and the lands are generally devoted to this crop. In all other parts of the state cotton is the staple. The best districts for cotton are the banks of Red river, Ouachita, Teche, and the Mississippi. Rice is more particularly confined to the banks of the Mississippi, where irrigation can be easily performed. The quantity of land within the state, adapted to the cultivation of the three staples, has been estimated as follows: sugar, 250,000 acres; rice, 250,000; cotton, 2,400,000. Some of the sugar planters have derived a revenue in some years, of \$1,000 from the labor of each of their hands; from \$500 to \$750 is the ordinary calculation. The amount of sugar made in Louisiana in 1810, was about 10,000,000 lbs; in 1814, not less than 15,000,000; and in 1817, 20,000,000, or nearly one third of the whole amount consumed in the United States.

Animals.] The extensive prairie lands in the southwestern part of the state, embracing the county of Opelousas, and the greater part of Attakapas, are most admirably adapted to the rearing of cattle, and have hitherto been used almost exclusively for that purpose. From this region the rest of the state is supplied with beef, butter and cheese. Many of the wealthy planters on the Teche and Vermillion have stock farms on Mermentau and Calcasieu rivers, and count their cattle by the thousand. The lakes near the mouths of Calcasieu and Sabine rivers are the retreat of immense flocks of wild geese and ducks, during the winter season.

Chief Towns.] *New-Orleans*, the capital of the state, is on the east bank of the Mississippi, 90 miles from its mouth in a direct line, and 105 by the course of the river. The city is regularly laid out; the streets are generally 40 feet wide, and cross each other at right angles. On the streets near the river the houses are principally of brick, but in the back part of the town, of wood. The buildings have no cellars, except the vacancy formed between the ground and the lower floors, which are raised 5 or 6 feet from the earth. The tornadoes, to which the country is subject, will not admit of the buildings being carried up many stories, as in other cities. Among the public buildings are an arsenal, a custom house, a hospital, a Catholic college, a female orphan asylum, two theatres, 5 banks and several churches for Catholics, Presbyterians and Episcopalians.

The city is admirably situated for trade, near the mouth of a noble river, whose branches extend for thousands of miles in different and opposite directions. It is already one of the greatest emporiums of commerce in America, and since steam-boat navigation has been successfully introduced on the Mississippi, it promises to become, at no distant day, one of the most commercial and populous places in the world. The river in front of the city is crowded with boats from Kentucky, Tennessee, Missouri, Ohio, and even from Pennsylvania and New-York. The population has increased with great rapidity. In 1802 it was estimated at 10,000;

in 1810, it was 17,242; and in 1820, 27,176, of whom, 7,355 were slaves, and 6,237 free blacks.

Natchitoches, pronounced *Nakitosh*, the largest town in the state west of the Mississippi, is on the west bank of Red river, 200 miles above its junction with the Mississippi. The French established it as a military post in 1717, and about one third of the inhabitants at present are of French origin. In the neighborhood are salt springs from which the settlements on Red river are supplied with this mineral. *Alexandria*, in the parish of Rapide, is a flourishing settlement on the right bank of Red river, 120 miles from its mouth and 80 below Natchitoches. *Baton Rouge*, in east Baton Rouge parish, is on the east bank of the Mississippi, 15 miles above the efflux of the Iberville, and 140 above New-Orleans. *St. Francisville* is a flourishing settlement in Feliciana parish, on the Mississippi, 30 miles above Baton Rouge. *Madisonville*, in St. Tamany parish, is 27 miles north of New-Orleans, on the small river Chefuncti, two miles from the point where it discharges itself into lake Pontchartrain.

History.] Louisiana was first settled by the French in 1699. In 1803 the whole country from the Mississippi to the Rocky mountains was purchased by the United States for about \$15,000,000. Soon after the purchase, the present state of Louisiana was separated from the rest of the territory, under the name of the Territory of Orleans. In 1811 the territory of Orleans was made a state, and admitted into the Union, under the name of the state of Louisiana. In 1812 the United States took possession of West Florida, and the part west of Pearl river was incorporated with the state of Louisiana. In December, 1814, the British made an attack on New Orleans, but were repulsed by the Americans under General Jackson, with the loss of about 3,000 men, killed, wounded and prisoners. The loss of the American army is stated at only seven men killed and six wounded.

Population and Religion.] In 1810 the population was 76,556, to which may be added 10,000 as the population of that part of West Florida which was annexed to the state in 1812. In 1820 the whole number was 153,407, of whom 69,064 were slaves, and 10,476 free blacks. Two thirds of this population is settled immediately upon the banks of the Mississippi. In the upper settlements the inhabitants are principally Canadians; in the middle, Germans; and in the lower, French and Spaniards. A few years since the inhabitants were principally Roman Catholics. In 1812 there was not one Protestant church of any denomination in the state. Since that time many have been formed, and the constant introduction of emigrants from the north is effecting a rapid revolution in all the institutions of the country.

State of Society.] In journeying from New-Orleans to the mouth of Sabine river, we meet with men in every stage of civilization. In New-Orleans, and other places on the banks of the Mississippi, the sugar and cotton planters live in splendid edifices, and enjoy all the pleasures that wealth can impart. In Attakapas and Opelousas, the glare of expensive luxury vanishes, and is

followed by substantial independence. In the western parts of Opelousas are found herdsmen and hunters; the cabins are rudely and hastily constructed, and the whole scene recalls to the imagination the primeval state of society.

Government.] The legislative power is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen for two years, and their number cannot be more than 50 nor less than 25. The senate consists of 14 members, chosen by districts, for four years. The executive power is vested in a governor, who is chosen by the general assembly out of the two highest candidates voted for by the people, and holds his office for 4 years.

Education.] Till very recently education was much neglected. Many of the inhabitants are unable to read or write. The government, however, has now commenced the establishment of schools, academies, and higher seminaries of learning. There is a Catholic college at New-Orleans.

Commerce.] The exports from Louisiana are not confined to its own produce. The bulky articles of all the Western states go down the Mississippi and are cleared out at New-Orleans. The value of the exports has increased with wonderful rapidity. In 1804 it was \$1,600,362; in 1806, \$3,887,323; in 1815, \$5,102,610; in 1817, \$13,501,036, or nearly two thirds as much as that of the whole United States in 1791. The number of arrivals and clearances at the port of New-Orleans, during the year ending October 1st, 1817, was 1,030. During the same year, 1,500 flat bottomed boats, and 500 barges arrived at the city from the upper country.

The difficulty of ascending the rapid current of the Mississippi heretofore prevented New-Orleans from supplying the Western states with foreign merchandize. It was found cheaper to purchase goods in Philadelphia and Baltimore, and transport them by land across the Alleghany mountains, than to stem the rapid current of the Mississippi. But steam boats are now successfully employed in ascending this river, and New-Orleans is rapidly becoming the emporium of the Western country. In 1819 there were 50 steam-boats on the western waters connected with the commerce of that city, and there were at the same time 13 new boats on the stocks.

TENNESSEE.

Situation and Extent.] Tennessee is bounded N. by Kentucky; E. by North Carolina; S. by Georgia, Alabama and Mississippi; and W. by Mississippi river, which separates it from Arkansas territory. It extends from 35° to 36° 30' N. lat. and from 81° 30' to 90° 10' W. lon. It is 430 miles long, 104 broad, and contains about 40,000 square miles, or 25,600,000 acres.

Divisions.] The state is divided into 48 counties, of which 26 are in West Tennessee and 22 in East Tennessee.

UNITED STATES.

WEST TENNESSEE.

Counties.	Pop. in 1810.	Pop. in 1820.	Slaves in 1820.	Chief towns.
Bedford,	8,242	16,012	3,588	Shelbyville.
Davidson,	15,608	20,154	7,899	Nashville.
Djackson,	4,516	5,190	1,305	Charlotte.
Franklin,	5,730	16,571	4,167	Winchester.
Giles,	4,546	12,558	3,261	Pulaski.
Hardin,		1,462	136	
Hickman,	2,583	6,080	700	Vernon.
Humphreys,	1,511	4,067	542	Reynoldsburgh.
Jackson,	5,401	7,593	750	Williamson.
Lawrence,		3,271	204	
Lincoln,	6,104	14,761	2,250	Fayetteville.
Maury,	10,350	22,141	6,420	Columbia.
Montgomery,	8,021	12,219	4,663	Clarksville.
Overton,	5,643	7,128	665	Monroe.
Perry,		2,384	223	
Robertson,	7,276	9,938	2,520	Springfield.
Rutherford,	10,285	19,552	5,187	Murfreesborough.
Shelby,		354	103	
Smith,	11,649	17,580	3,554	Dixon's springs.
Stewart,	4,262	8,397	1,352	Dover.
Sumner,	13,792	19,211	5,762	Gallatin.
Warren,	5,725	10,348	950	M'Minville.
Wayne,		2,459	72	
White,	4,028	8,701	593	Sparta.
Williamson,	13,153	20,640	6,972	Franklin.
Wilson,	11,952	18,730	3,844	Lebanon.
Total,	160,370	287,501	67,682	

EAST TENNESSEE.

Anderson,	3,959	4,668	349	Clinton.
Bledsoe,	8,539	4,005	361	Pike.
Blount,	3,259	11,258	1,050	Marysville
Campbell,	2,668	4,244	116	Jacksonburg.
Carter,	4,190	4,835	345	Elizabethtown.
Claiborne,	4,798	5,508	377	Tazwell.
Cooke,	5,154	4,892	468	Newport.
Granger,	6,397	7,651	656	Rutledge.
Greene,	9,713	11,324	829	Greenville.
Hamilton,		821	39	
Hawkins,	7,643	10,949	1,331	Rogersville.
Jefferson,	7,309	8,953	892	Dandridge.
Knox,	10,171	13,034	1,625	Knoxville.
Marian,		3,888	167	
M'Minn,		1,623	153	
Monroe,		2,529	156	
Morgan,		1,076	46	
Rhea,	2,504	4,215	334	Washington.
Roane,	5,503	7,695	814	Kingston.
Savner,	4,505	4,772	290	Savnerville.
Sullivan,	6,847	7,015	826	Blountsville.
Washington,	7,740	9,557	979	Jonesborough.
Total,	101,277	135,312	12,413	
West Tennessee,	160,370	287,501	67,682	
Grand total,	261,647	422,813	80,095	

Face of the Country, Soil and Productions.] The Cumberland mountains, which consist of stupendous piles of craggy rocks, run from N. E. to S. W. through the centre of the state, dividing it into East Tennessee and West Tennessee. East Tennessee is intersected by several ranges of mountains, but the valleys between the ridges are extensive and fertile. West Tennessee is partly level and partly hilly, and contains much fertile soil, particularly on the banks of the rivers. The principal productions are cotton, tobacco, wheat, hemp, and Indian corn.

Climate.] The climate of Tennessee is generally healthy. The season of vegetation generally commences 6 or 7 weeks sooner than in New Hampshire, and continues as much later. Snow falls seldom, and does not lie long. Ten inches is a deep snow, and 10 days an extraordinary term for its duration. Cumberland river has been frozen but 3 or 4 times since the settlement of the country.

Rivers.] The Mississippi forms the western boundary. Its principal tributaries from this state are *Obian*, *Chickasaw*, *Forked Deer*, and *Wolf rivers*, all of which are small streams. *Cumberland river* comes from Kentucky, and making a circular bend, passes into Kentucky again.

The *Tennessee*, properly speaking, rises in Virginia, under the name of the *Holston*, which runs in a S. W. direction, and crossing the northern boundary of this state receives the *Watauga* from North Carolina, and, near Knoxville, *French Broad river*, through a part of the same state, from South Carolina. A little below Knoxville the *Holston* unites with the *Tennessee*, which rises in South Carolina, and is comparatively speaking a small river, boatable only 30 or 40 miles. Soon after this junction, the united stream, now bearing the name of *Tennessee*, receives from the north *Clinch river*, which rises in Virginia, and is boatable 200 miles. From this grand confluence, the *Tennessee*, rolling on in a S. W. direction, receives the *Hixassee* from Georgia; crosses the southern boundary of Tennessee into the N. E. corner of Alabama; forms the arc of a circle in that state of about 130 miles chord, usually called the Great Bend; recrosses the boundary near the N. W. corner of Alabama; crosses West Tennessee in a northerly direction, and enters *Ohio river* in the western part of Kentucky, 57 miles from the Mississippi, by a mouth 600 yards wide. It is navigable to the Muscle shoals, in Alabama, 250 miles from its mouth, at all seasons of the year, for the largest row boats. Here it spreads out and becomes so shallow that it is difficult for boats to pass when the water is low. Above the shoals there is no obstruction for 250 miles, till you come to the Suck or Whirl, where the river breaks through the Cumberland mountains. The stream, which a few miles above, is half a mile wide, is here compressed to the width of about 70 yards. Just as it enters the mountain, a large rock projects from the northern shore, which causes a sudden bend in the river; the water is thrown with great violence and rapidity against the southern shore, whence it rebounds around the point of the rock,

and produces the whirl. The whirl is passed without much danger or difficulty, the situation of the shore being such, that boats ascending the river may be towed up.—The principal tributary of Tennessee river in West Tennessee is *Duck river*, which rises in the Cumberland mountains, and running in a direction N. of W. waters a considerable tract of country included between the Cumberland and the southern boundary of the state. It is navigable for boats 90 miles.

Chief Towns.] *Nashville*, the capital of Davidson county, is situated on the south side of Cumberland river, in the midst of a very fertile and populous country, and is the largest and most flourishing town in the state. The Cumberland is navigable to this place for vessels of 30 or 40 tons during the greater part of the year, and in the highest floods for vessels of 400 tons. Steam boats ply between Nashville and New Orleans. The town contains 2 banks, several manufactories and about 3,000 inhabitants.

Knoxville is on the north bank of the Holston, 22 miles above its junction with the Tennessee, 4 below the mouth of French Broad river, and 200 east of Nashville. It is regularly laid out, and contains a bank, a respectable academy, 3 houses of public worship, and about 2,000 inhabitants.

Murfreesborough, the capital of the State, is in Rutherford county, 32 miles S. E. of Nashville. It was made the seat of government in 1817. The surrounding country is level, and very fertile, abounding with wheat, cotton, and tobacco. Population, about 1,000.

Education.] There is a flourishing college at Greenville, in East Tennessee, on French Broad river, 81 miles east of Knoxville. It was incorporated in 1794, and has between 70 and 80 students. Two other colleges were also incorporated in East Tennessee, in 1794; one in Washington county, and the other in Knox, but they are not at present in operation. In West Tennessee there is a college at Nashville, called Cumberland college, under the direction of a president and one tutor.

Population and Religion.] The population in 1790 was 35,691; in 1800, 105,602; in 1810, 261,727, and in 1820, 422,813, of whom 80,095, or nearly one fifth part, were slaves. The slaves are most numerous in the western part of the state. In East Tennessee they constitute less than one tenth part of the population. The most numerous denominations of Christians are Methodists, Baptists and Presbyterians.

Indians.] The Cherokees inhabit an extensive country, included within the chartered limits of North Carolina, Georgia, Alabama and Tennessee, and containing between 15 and 16,000 square miles. They live thinly dispersed over the country, in log cabins, not much inferior to those of the whites in the neighboring settlements. A considerable number of whites reside in the nation, and many have obtained all the privileges of citizenship by marrying female natives. These intermarriages have been so long practised that a considerable part of the tribe are

of mixed blood. The mixed breed can generally speak English, and a few send their children to the white settlements for education. As to their persons, the Cherokees are well formed and of a good appearance. Some of them have as fine countenances as can easily be found in any country. The children are almost universally active and healthy, and as apt to learn as the children of civilized people. Some of the half-breeds have large plantations, which they cultivate with the aid of slaves, but the full-blooded Cherokees do not carry on agriculture with much vigor. A short time since the number of the Cherokees was 12,395. Within a few years, however, many of the tribe have emigrated to the country on Arkansas river, on the west side of the Mississippi; the government of the United States having assigned them lands on that river, in exchange for a part of the Cherokee country. In the treaty which was made on this occasion, the government appropriated about 160,000 acres of the land ceded by the Cherokees, for a perpetual school fund, to be applied under the direction of the President of the United States, to the instruction of the Cherokees who remain on this side of the Mississippi.

The American Board of Commissioners for Foreign missions established a mission among the Cherokees in 1817. The principal station is at Brainerd, on the western side of Chickamaugh creek, 2 miles from the southern boundary of the state, and 30, in an easterly direction, from the N. W. corner of Georgia. Schools have been established in various other places. In 1820, numerous buildings had been erected for the accommodation of the mission, a farm of 60 acres was under cultivation, and more than 200 pupils were receiving instruction in the various schools. Besides being taught reading, writing, arithmetic, and the principles of Christianity, the children are instructed in the most useful arts of civilized life. The boys learn the use of the hoe and the axe, while the girls learn the use of the spinning wheel and the needle. The Cherokees are much pleased with the missionaries. Throughout the nation there is a general and strong sentiment in favor of having their children instructed. There is another respectable missionary station, established in this nation in 1801, by the Moravians, at Springplace, in Georgia, 35 miles S. E. of Brainerd.

The *Chickasaws*, a few years since, occupied an extensive country, lying within the chartered limits of the states of Kentucky, Tennessee, Mississippi and Alabama; and bounded E. by Tennessee river; N. by the Ohio; W. by the Mississippi, and S. by the Choctaw country. The part of this tract lying in Tennessee and Kentucky has recently been ceded to the United States. The Chickasaws, in most respects, resemble their neighbors the Choctaws and Cherokees. The number of the tribe, according to an official statement, is 6,456.

Government.] The legislative power is vested in a general assembly, consisting of a senate and house of representatives, both chosen for two years. The house of representatives cannot consist of more than 40 members, and the senate can never be less

than one third nor more than one half of the number of representatives. The executive power is vested in a governor, who also holds his office for two years. The judges of the several courts of law are appointed by the general assembly, and hold their offices during good behavior.

Commerce.] The principal exports are cotton, tobacco and wheat. The usual route to a market is down the Tennessee and Cumberland rivers to the Ohio, and thence down the Ohio and Mississippi to New Orleans. This course is very circuitous, and it is expected that a road or canal will soon be formed, connecting Tennessee river with some of the branches of the Tombigbee, which will shorten the distance to the gulf of Mexico more than one half. Cattle are raised in large numbers in East Tennessee, and sent to the seaports in the Atlantic states. Foreign goods have hitherto been brought from Philadelphia and Baltimore to East Tennessee, in wagons; and to West Tennessee, principally in wagons as far as Pittsburgh, and thence by water down the Ohio and up the Cumberland.

KENTUCKY.

Situation and Extent.] Kentucky is bounded on the N. W. and N. by the states of Illinois, Indiana and Ohio, from which it is separated by Ohio river; E. by Virginia, from which it is separated by Big Sandy river and the Cumberland mountains; S. by Tennessee; and W. by the state of Missouri, from which it is separated by the Mississippi river. It extends from 36° 30' to 39° 10' N. lat. and from 81° 50' to 89° 26' W. lon. It is 300 miles long on the southern line. The area is estimated at 42,000 square miles.

Divisions.] The state is divided into 67 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1810.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Chief towns.</i>
Adair,	6,011	8,765	1,509	Columbia.
Allen,		5,327	723	Scottsville.
Barren,	11,286	10,328	2,446	Glasgow.
Bath,		7,961	1,224	
Boone,	3,008	6,542	1,298	Burlington.
Bourbon,	18,000	17,664	5,165	Paris.
Bracken,	3,706	5,290	676	Augusta.
Breckenridge,	3,430	7,485	1,267	
Bullitt,	4,311	5,831	1,245	
Butler,	2,181	3,083	472	
Caldwell,	4,268	9,022	1,444	
Campbell,	3,473	7,022	897	Newport.
Casey,	3,285	4,349	456	Liberty.
Christian,	11,020	10,459	3,491	Hopkinsville.
Clarke,	11,519	11,449	3,463	Winchester.
Clay,	2,398	4,393	285	Manchester.

<i>Counties.</i>	<i>Pop.</i> <i>in 1810.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Chief towns.</i>
Cumberland,	6,191	8,053	1,332	Burksville.
Davies,		2,876	852	Owensborough.
Estill,	2,032	3,507	231	
Fayette,	21,370	23,250	9,274	Lexington.
Fleming,	8,947	12,186	1,144	
Floyd,	3,485	8,207	197	Prestonville.
Franklin,	3,013	11,024	3,550	Frankfort.
Gallatin,	3,307	7,075	1,242	Port William.
Garrard,	9,186	10,851	2,918	Lancaster.
Grant,		1,805	137	
Grayson,	2,301	4,055	184	
Greene,	6,735	11,943	3,241	Greensburg.
Greenup,	2,369	4,311	566	
Hardin,	7,531	10,499	1,466	Elizabethtown.
Harlan,		1,961	198	
Harrison,	7,752	12,278	2,137	Cynthiana.
Hart,		4,184	596	
Henderson,	4,703	5,714	2,265	Henderson.
Henry,	6,777	10,816	2,004	Newcastle.
Hopkins,	2,964	5,322	932	Madisonville.
Jefferson,	13,399	20,768	6,886	Louisville.
Jessamine,	8,377	9,297	2,002	Nicholasville.
Knox,	5,875	3,661	337	Barboursville.
Lewis,	2,357	3,973	464	Clarksburg.
Lincoln,	8,676	9,979	3,053	Stanford.
Livingston,	3,674	5,824	1,020	Smithland.
Logan,	12,123	14,423	4,698	Russellville.
Madison,	15,540	15,954	4,154	Richmond.
Mason,	12,459	13,588	3,366	Washington.
Mercer,	12,630	15,587	3,825	Danville.
Monroe,		4,956	498	
Montgomery,	12,975	9,587	2,054	Mount Sterling.
Muhlenburg,	4,181	4,979	675	Greenville.
Nelson,	14,078	16,273	3,875	Bardstown.
Nicholas,	4,898	7,973	919	
Ohio,	3,792	3,879	468	Hartford.
Owen,		2,031	207	
Pendleton,	3,061	3,086	328	Falmouth.
Pulaski,	6,897	7,597	637	Somerset.
Rockcastle,	1,731	2,249	155	
Scott,	12,419	14,219	4,620	Georgetown.
Shelby,	14,377	21,047	5,158	Shelbyville.
Simpson,		4,852	803	
Todd,		5,089	1,729	
Trigg,		3,874	816	
Union,		3,470	1,035	
Warren,	11,937	11,776	2,554	Bowling Green.
Washington,	13,248	15,947	3,734	Springfield.
Wayne,	5,430	7,951	553	Monticello.
Whitley,		2,340	96	
Woodford,	9,650	12,207	4,678	Versailles.
Total,	406,511	564,317	126,732	

Rivers.] Kentucky is almost insulated by navigable rivers. The *Big Sandy*, the *Ohio* and the *Mississippi* form its boundary on three sides, while the *Cumberland*, in two places, intersects its southern border. The *Big Sandy* rises in the *Cumberland*

mountains, and running in a northerly direction forms the boundary between Virginia and Kentucky, and falls into the Ohio, after a course of 200 miles. *Cumberland* river rises in the Cumberland mountains, near the sources of the Big Sandy, and running in a southwesterly direction, crosses the southern boundary of the state into Tennessee, where it makes a great bend, and assuming a northwesterly direction returns to Kentucky, and discharges itself into the Ohio, 10 miles above the mouth of Tennessee river, after a course of 600 miles, for 500 of which it is navigable for boats.

The principal rivers which lie wholly within the state, beginning in the east, are, 1. *Licking* river, which rises in the Cumberland mountains, and running in a N. W. direction, discharges itself into the Ohio at Newport, opposite Cincinnati, after a course of 180 miles. In spring floods, it is navigable for 100 miles from its mouth, but for ten months out of twelve its navigation is of little value. 2. The *Kentucky*, which rises in the Cumberland mountains, near the sources of the Cumberland and the Licking, and running in a N. W. direction, for 280 miles, discharges itself into the Ohio at Port William, 77 miles above the rapids at Louisville. It is navigable for boats of considerable size 180 miles, in the winter floods. Its principal tributary is the *Elkhorn*, which joins it 8 miles below Frankfort. 3. *Salt* river, which falls into the Ohio 20 miles below Louisville, and is navigable 65 miles. On its banks are numerous salt licks. 4. *Green* river, which rises near the centre of the state, and running in a westerly direction for 280 miles, discharges itself into the Ohio, 120 miles below Louisville and 50 above the mouth of the Cumberland. It is navigable for boats nearly 200 miles.

Face of the Country, Soil and Productions.] The only mountains are the Cumberland range, which separate Kentucky from Virginia. The eastern counties are mountainous. A tract along the banks of the Ohio, from 5 to 20 miles wide, and extending through the whole length of the state, has a good soil, but is hilly and broken, except the lands immediately on the Ohio, for about one mile in width on an average, which are bottom lands, and subject to periodical inundations. Between this tract, the eastern counties and Green river, lies a fine country, which has been called the garden of the state. It is about 150 miles long, and from 50 to 100 miles wide, and comprises the counties of Mason, Fleming, Montgomery, Clarke, Bourbon, Fayette, Scott, Harrison, Franklin, Woodford, Mercer, Jessamine, Madison, Garrard, Casey, Lincoln, Washington and Green. The surface of this district is agreeably undulating, and the soil black and fertile. The country between Green and Cumberland rivers is called "the barrens." In 1800 the legislature of Kentucky made a grant of this tract to actual settlers, under the impression that it was of little value, but it proves to be excellent land; and hogs and cattle are raised here in abundance.

The whole state, below the mountains, rests on an immense bed of lime stone, usually about 3 feet below the surface. There

are every where apertures in this limestone, through which the waters of the rivers sink into the earth. The large rivers of Kentucky, for this reason, are more diminished during the dry season, than those of any part of the United States, and the small streams entirely disappear. The banks of the rivers are natural curiosities. They have generally worn very deep channels in the calcareous rocks over which they flow. The precipices formed by Kentucky river are in many places awfully sublime, presenting perpendicular banks of 300 feet of solid limestone, surmounted with a steep and difficult ascent, four times as high. In the S. W. part of the state, between Green river and the Cumberland, there are several wonderful caves: one, called the Mammoth cave, is said to be 8 or 10 miles long.

The principal productions of Kentucky are hemp, tobacco, wheat and Indian corn. Salt springs are numerous, and supply not only this state, but a great part of Ohio and Tennessee with this mineral. Iron ore abounds in various places, but the metal is not of a good quality.

Chief Towns.] *Frankfort*, the capital of the state, is regularly laid out on the east side of Kentucky river, 60 miles above its confluence with the Ohio. The site of the town is a semicircular alluvial plain, from 150 to 200 feet lower than the table land in its rear. The river is here about 80 yards wide, and after heavy rains frequently rises 60 feet. Opposite Frankfort, and connected with it by a bridge, is South Frankfort, which is rapidly increasing. Steam boats of 300 tons come up the river as far as this place when the water is high, and most of the foreign goods consumed in Kentucky are landed here or at Louisville. Population, in 1820, 1,679.

Lexington, the largest town in the state, and the seat of Transylvania university, is delightfully situated, in a beautiful valley, on Town fork, a small stream which falls into the south branch of Elkhorn river, 25 miles E. S. E. of Frankfort. It is regularly laid out, and contains 3 banks; and 7 houses of public worship, 3 for Presbyterians, and one each, for Episcopalians, Baptists, Methodists and Roman Catholics. The growth of the town has been exceedingly rapid. In 1797, it contained only about 50 houses, and the best farmers lived in log cabins. It is now a large and beautiful town, covered with stately and elegant buildings, and in wealth and refinement is not surpassed by any place in the western country. The country around Lexington is much admired for the beauty of its scenery, and is adorned with more than 50 handsome country seats. The population of the town, in 1820, was 5,279.

Louisville is pleasantly situated on an elevated and beautiful plain, on the south bank of the Ohio, immediately above the rapids, and 50 miles west of Frankfort. It contains 3 banks; a theatre; and 3 houses of public worship, 1 for Roman Catholics, 1 for Presbyterians and 1 for Methodists. Among the manufacturing establishments is a distillery, which yields 1200 gallons

a day, and is the most extensive establishment of the kind in the United States. Here are also 5 tobacco manufactories; a factory for the construction of steam engines, in which about 60 workmen are employed; a soap and candle manufactory, supposed to be the largest in the western country; a sugar refinery; a steam flour mill, and two steam saw mills. The commerce of Louisville and of Shippingport, which lies adjacent, has increased rapidly within a few years. There are now upwards of 25 steam boats, measuring together 6,050 tons, employed in their commerce. The population of Louisville, in 1820, was 4,012.

Shippingport is on the Ohio, 2 miles below Louisville, at the foot of the rapids, on a beautiful plain. It is the natural harbor and landing place for all vessels ascending the Ohio. During three-fourths of the year they of necessity stop here, which they can do with perfect safety, as there is a basin immediately in front of the town, capable of containing any number of vessels, of any burden.

Russellville, the capital of Logan county, is a flourishing town, in the midst of a very fertile country, and contained, in 1820, 1,712 inhabitants. *Newport*, the capital of Campbell county, is on the Ohio, immediately above the mouth of Licking river, and opposite Cincinnati. An arsenal has been established here by the United States, with barracks for 2 or 3 regiments of soldiers. *Bardstown*, the capital of Nelson county, is on a branch of Salt river, 35 miles S. W. of Frankfort. Here is a large Roman Catholic cathedral.

Canal.] The Ohio, at the rapids in Louisville, descends 22 feet in about two miles. Boats ascend, but not without difficulty. The legislature of Kentucky, several years since, incorporated a company for opening a canal around these rapids; and, in 1816, the ground was surveyed, and the expense of a canal for vessels of 30 tons, was estimated at \$240,000.

Education.] Transylvania university, in Lexington, was originally incorporated before the separation of Kentucky from Virginia. In 1818, it was re-organized under a board of 13 trustees, who are chosen biennially by the legislature. In 1820, its officers were a president and 8 professors, of whom 4 were medical professors; 3 tutors; 2 assistant tutors, and the principal of the preparatory department. The number of students was 235, of whom 34 were medical students, and 99 in the preparatory department. The library contains about 3,000 volumes, and a considerable sum has been expended in the purchase of a chemical and philosophical apparatus.—A college was established, in 1819, at Danville, 33 miles S. S. W. of Lexington. It has 2 professors. Respectable schools and academies are increasing in the state, the result of individual exertions.

Population and Religion.] The population of the state, in 1790, was 73,677; in 1800, 220,959; in 1810, 406,511; and, in 1820, 564,317; having increased nearly eightfold in 30 years. Of the whole population in 1820, 126,732 were slaves. The principal religious denominations are Baptists, Presbyterians and

Methodists. There are a few Catholics and some Episcopalians. The Catholic bishop resides at Bardstown.

Government.] The legislative power is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen for one year and cannot be less than 53 nor more than 100 in number. The senate consists of not less than 24 nor more than 38 members, who hold their office for 4 years, one fourth part being chosen annually. The executive power is vested in a governor, who holds his office for four years, but is ineligible for seven years after the expiration of the time for which he shall have been elected.

Commerce and Manufactures] Hemp, tobacco and wheat are the principal exports. These are carried down the Ohio and Mississippi to New-Orleans, and foreign goods are received from the same place in return. Louisville is the centre of this trade. The principal manufactures are cloth, spirits, cordage, salt, and maple sugar. The value of the manufactures, in 1810, was estimated at \$6,181,024.

Curiosity.] In Big Bone valley, about 20 miles S.W. of Newport, larger quantities of huge animal remains have been discovered than in any other part of the United States. It is now more than half a century since these first attracted the attention of European travellers, and so many of the bones have been carried away, that a few fragments only remain to excite the feelings which are naturally produced by a view of this tomb of the mammoths.

OHIO.

Situation and Extent.] Ohio is bounded N. by the Michigan territory and lake Erie; E. by Pennsylvania; S. E. by Virginia; S. by Kentucky, and W. by Indiana. It extends from 38° 30' to 42° N. lat. and from 80° 32' to 84° 50' W. lon. The area is estimated at 39,000 square miles.

Divisions.] In 1820 there were 59 counties, and 742 towns.

<i>Counties.</i>	<i>Towns.</i>	<i>Pop.</i> <i>in 1810.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>
Adams,	9	9,434	10,406	West Union.
Ashtabula,	19		7,382	Jefferson.
Athens,	12	2,791	6,338	Athens.
Belmont,	15	11,097	20,329	St. Clairsville.
Brown,	7		13,356	Ripley.
Butler,	12	11,150	21,746	Hamilton.
Champaign,	10	6,303	8,479	Urbana.
Clarke,	10		9,536	Springfield.
Clermont,	11	9,965	15,820	Williamsburg.
Clinton,	7	2,674	8,085	Wilmington.
Columbiana,	23	10,878	22,033	New Lisbon.
Coshocton,	14		7,086	Coshocton.

<i>Counties.</i>	<i>Towns.</i>	<i>Pop.</i> <i>in 1810.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>
Cuyahoga,	18	1,459	6,328	Cleveland.
Darke,	8		3,717	Greenville.
Delaware,	20	2,000	7,639	Delaware.
Fairfield,	14	4,361	16,633	Lancaster.
Fayette,	7	1,854	6,316	Washington.
Franklin,	17	3,486	10,292	Franklinton.
Gallia,	14	4,181	7,098	Gallipolis.
Geauga,	18	2,917	7,791	Chardon.
Greene,	8	5,870	10,529	Xenia.
Guernsey,	14	3,051	9,292	Cambridge.
Hamilton,	12	15,258	31,764	Cincinnati.
Harrison,	9		14,345	Cadiz.
Highland,	10	5,760	12,308	Hillsborough.
Hocking,	4		2,130	Logan.
Huron,	22		6,675	Norwalk.
Jackson,	10		3,746	Jackson.
Jefferson,	11	17,260	18,531	Steubenville.
Knox,	11	2,149	8,326	Mount Vernon.
Lawrence,	10		3,499	Burlington.
Licking,	21	3,852	11,861	Newark.
Logan,	5		3,131	Bellefontaine.
Madison,	10	1,603	4,799	London.
Medina,	14		3,082	Medina.
Meigs,	10		4,480	Meigsville.
Miami,	12	3,941	8,851	Troy.
Monroe,	7		4,645	Woodsfield.
Montgomery,	9	7,722	15,999	Dayton.
Morgan,	14		5,297	M'Connellsville.
Muskingum,	20	10,036	17,824	Zanesville.
Perry,	9		8,429	Somerset.
Pickaway,	12	7,124	18,149	Circleville.
Pike,	6		4,253	Piketon.
Portage,	28	2,995	10,095	Ravenna.
Preble,	11	3,804	10,327	Eaton.
Richland,	21		9,169	Mansfield.
Ross,	14	15,514	20,619	Chillicothe.
Sandusky,	5		852	Croghanville.
Scioto,	11	3,399	5,750	Portsmouth.
Shelby,			2,106	Sidney.
Starke,	20	2,734	12,406	Canton.
Trumbull,	31	8,671	15,546	Warren.
Tuscarawas,	14	3,045	8,328	New Philadelphia.
Union,	3		1,996	Marysville.
Warren,	9	9,925	17,837	Lebanon.
Washington,	17	5,991	10,425	Marietta.
Wayne,	22		11,933	Wooster.
Wood,	1		733	Maumee
Total,	742	230,760	581,434	

Since 1820, 12 new counties have been formed out of the country recently purchased from the Indians in the N. W. part of the state; viz. Allen, Crawford, Hancock, Hardin, Henry, Marion, Mercer, Paulding, Putnam, Seneca, Van Wert and Williams.

Rivers.] The *Ohio* runs along the whole southern border, a distance of 420 miles, separating the state from Virginia and Ohio.

The principal tributaries of the *Ohio*, from this state, beginning in the east, are, 1. The *Muskingum*, which rises in Portage county, near the N. E. corner of the state, and running in a southerly direction passes by Coshocton and Zanesville, and discharges itself into the *Ohio* at Marietta, after a course of 200 miles. Above Coshocton, it bears the name of *Tuscarawa* river. The navigation is obstructed by falls at Zanesville, but a canal and locks have been commenced around them, which will remove the difficulty. Above Zanesville, the river is navigable for large boats to Coshocton, and for small boats nearly to its source. 2. The *Hockocking*, which rises in Fairfield county, and running in a southeasterly direction, discharges itself into the *Ohio*, at Troy, 25 miles below Marietta, after a course of 80 miles, for 70 of which it is navigable. 3. The *Scioto*, which rises in Hardin county, and running at first in a southeasterly and afterwards in a southerly direction, passes by Columbus, Circleville and Chillicothe, and discharges itself into the *Ohio*, at Portsmouth, after a course of 170 miles, for 130 of which it is navigable. 4. The *Little Miami*, which rises in Madison county, and running in a southwesterly direction, falls into the *Ohio*, 7 miles above Cincinnati, after a course of 70 miles. It is one of the best mill streams in the state, and 30 or 40 mills are already erected upon it. 5. The *Miami* or *Great Miami*, which rises in Hardin county, and running in a S. W. direction, falls into the *Ohio*, exactly in the southwestern corner of the state, after a course of more than 100 miles. It is difficult of navigation on account of the rapidity of the current, but has numerous mill seats.

The principal rivers which fall into lake Erie, from this state, are, 1. The *Maumee*, which is formed by the confluence of St. Joseph's and St. Mary's rivers at Fort Wayne, in the N. E. part of Indiana. It runs in a northeasterly direction, and falls into Maumee bay, at the western extremity of lake Erie. At the distance of 18 miles from its mouth, a series of shoals and rapids commences, and continues for 15 miles up the river. 2. *Sandusky* river, which rises in Crawford county, and running at first in a westerly and afterwards in a northerly direction, discharges itself into Sandusky bay after a course of 80 miles. It is navigable nearly to its source, and in one part of its course approaches within 4 miles of the navigable waters of the *Scioto*. 3. The *Cuyahoga*, which rises in Geauga county, in the northeastern part of the state, and discharges itself into lake Erie at Cleveland, after a circuitous course of more than 60 miles.

Face of the Country and Soil.] The interior parts of the state and the country bordering on lake Erie are generally level and

in some places marshy. About one third or one quarter of the state, comprehending the eastern and southeastern part, bordering on the Ohio river, is generally hilly and broken, but not mountainous. Immediately on the banks of the Ohio and of several of its tributaries, are numerous tracts of interval land, of most exuberant fertility. On both sides of the Scioto, and of the Great and Little Miami, are perhaps the most extensive bodies of rich and level land. In many places are extensive prairies, particularly on the head waters of the Muskingum and Scioto, and between the Scioto and the sources of the two Miami rivers. Some of these prairies are low and marshy, and yield spontaneously a large quantity of coarse grass from two to five feet in height; others are elevated, and are frequently called barrens, not, however, on account of their sterility, for they are often fertile. The height of land which divides the waters of Ohio river from those of lake Erie, is the most marshy tract in the state, while the driest land lies along the margins of the rivers.

Productions.] Wheat is the principal production. From 70 to 100 bushels of corn are said to be frequently produced on an acre. Other kinds of grain and fruits of various sorts are also cultivated. Coal is found in abundance along the Ohio in the eastern part of the state. Salt springs have been discovered and wrought on the Muskingum, a few miles below Zanesville, and in various other places.

Climate and Diseases.] The climate of Ohio has been commonly considered warmer in the same parallels than that of the Atlantic states. The difference was considered by Mr. Jefferson, as equal to what would result from three degrees of latitude. Observations, however, which have been made at Cincinnati, for a series of years, seem to prove that there is no foundation for this opinion, or, at least, if there be a difference, it cannot equal one third of what has been mentioned. The opinion that the climate on the Ohio is more liable to sudden and extreme changes, and more moist than that of the eastern states is equally erroneous. The diseases to which immigrants are most liable, are bilious and typhus fevers. This is especially the case with the natives of New-England and New-York, who in coming here undergo a change of climate greater than they seem generally to anticipate. They should, therefore, endeavor to arrive in the country late in the autumn; and before the ensuing summer place themselves in the most healthy situations which can be found. If they are careful in this respect, and in the heat of summer shun the evening air, and the noon-day sun, and avoid what is denominated a bilious habit, very few will suffer an attack; but without such attention, a *seasoning*, as it is termed, will probably be experienced the first summer after an arrival from the north. In the second, whether the first be sickly or not, there is but little danger.

Chief Towns.] Cincinnati, the capital of Hamilton county and the largest town in the state, is situated on the north bank of Ohio river, opposite Newport in Kentucky, and about 20 miles

from the mouth of the Great Miami river, at the S. W. corner of the state. It is regularly laid out, in a pleasant and healthy situation, and is one of the most flourishing towns west of the Alleghany mountains. The growth of the city has been rapid, almost without a parallel. In 1805, the population was 500; in 1810, 2,540; in 1820, 9,642. In 1819 it contained a court-house; 3 brick market houses; 4 printing offices; a steam flour mill, built of stone, 9 stories high; a steam saw mill; 1 woollen and 4 cotton factories; 2 glass houses, and several other manufacturing establishments; 4 banks; a college; and 9 or 10 houses of public worship for different denominations. The commerce of the town is very flourishing. About 130,000 barrels of flour were inspected here during the year ending April 1st, 1819, and more than 120,000 bushels of salt imported. A company has been recently formed for the purpose of importing goods directly from Europe by the way of New-Orleans.

Chillicothe, the capital of Ross county, is regularly laid out on the west bank of Scioto river, 45 miles, in a direct line, from its mouth, on the border of an extensive and fertile plain, of about 10,000 acres. It contains 3 banks, 3 houses of public worship, and an academy; and in the vicinity are many valuable mills and manufacturing establishments. Population, in 1820, 2,426.

Zanesville, the capital of Muskingum county, is situated on the east side of Muskingum river, at the falls, opposite Putnam. It is a very flourishing town, and is well situated for trade and manufactures. The navigation of the Muskingum is uninterrupted from its mouth; the falls afford numerous fine mill seats, and the surrounding country abounds with inexhaustible beds of coal for such establishments as require the use of fuel. Here are already erected 2 glass-houses, several flour mills, an oil mill, saw mills, a nail factory, and a woollen factory. A company was incorporated in 1814, for the construction of a canal and locks around the falls, and the work is now rapidly progressing. The expense is estimated at from 70,000 to 100,000 dollars, and the company intend to unite with the canal extensive water works for manufacturing purposes. The population of Zanesville, in 1820, was 2,052. *Putnam* is a flourishing town on the west bank of Muskingum river, opposite Zanesville, and connected with it by two bridges. Population, in 1820, 512.

Columbus, the capital of the state, is regularly laid out, on a pleasant rising ground on the east side of Scioto river, just below the confluence of the Whetstone, 45 miles north of Chillicothe. The growth of the town has been remarkably rapid. In 1812, the lots were first exposed for sale, with the timber then standing upon them, and in 1820, it contained a handsome state-house, a building for the public offices, and a penitentiary, all of brick; a bank; a market-house; 2 printing offices; more than 200 houses and 1,500 inhabitants.

Steubenville, the capital of Jefferson county, is on the west bank of Ohio river, in the midst of a fertile and populous country, abounding with coal and iron ore. It was regularly laid out in

1798, and has very rapidly increased. The population in 1810, was 800; and in 1820, 2,539.

Marietta, the capital of Washington county, is on the west bank of Ohio river, immediately above the mouth of the Muskingum, and 178 below Pittsburgh. Ship building was formerly carried on here to a considerable extent, and since 1816 this business has revived. The situation of the town is unfortunate; parts of it being liable to annual inundation. Population of the township, in 1820, 1,746.

Cleveland, the capital of Cuyahoga county, is situated at the mouth of Cuyahoga river, on the southern shore of lake Erie, and is a noted place of embarkation for various parts of the lake. Population, in 1820, 606. *Circleville*, the capital of Pickaway county, is on the east side of Scioto river, 26 miles south of Columbus and 19 north of Chillicothe. It is situated on two ancient fortifications or mounds of earth, one circular, the other square; the areas of which, together, cover nearly 20 acres. The round fort consists of two circular but parallel walls, about 20 feet high, and at the top 50 feet asunder. There was originally but one regular opening into the circular fort, and that was on the east side, from the square fort. The latter has seven avenues leading into it, beside that which communicates with the circle. The town lies principally within the circular mound, and hence derives its name. Population, in 1820, 535. *Athens*, the seat of the Ohio University, is on a peninsula, formed by a large bend of Hockhocking river, 37 miles from its mouth and 40 west of Marietta. Population, in 1820, 1,094.

Canals and Roads.] It has been proposed to connect lake Erie with Ohio river by means of a canal from the Cuyahoga, which empties itself into lake Erie, to the Tuscarawa, one of the upper streams of the Muskingum. Between these rivers there is now only a short portage, and so certain is it that the two rivers may be connected by a canal, that in the law of Congress, appropriating a portion of the public lands to the improvement of inland navigation, 100,000 acres were assigned for defraying the expense of carrying into effect this project. Of all the canals proposed for connecting the waters of the lakes with those of the Mississippi, this probably will be first opened, and will be a great benefit to the country through which it passes. It is supposed that lake Erie may also be connected with the Ohio by means of canals, uniting the branches of Maumee, with a branch of the Great Miami.—Three per cent. of the net proceeds of the United States' lands within the limits of Ohio, have been given by Congress to the legislature for the purpose of opening and improving its roads. The produce of this fund has hitherto been divided among so many roads, that very little of the good which was anticipated, has been derived from it.

Education.] There are three institutions with the title of university in this state, viz. Cincinnati university, at Cincinnati; the Ohio university, at Athens, on the Hockhocking; and the Miami university, at Oxford, in Butler county, near the S. W.

corner of the state. There are besides two incorporated colleges, one at Cincinnati; and the other at Worthington, on Wheelstone river, 9 miles north of Columbus. The *Cincinnati university* has existed only on paper, and may now be considered as extinct. The *Ohio university* is endowed with two townships or 46,000 acres of land, and has an annual income of 2,300 dollars. It is just commencing its operations. In 1813 a large and convenient edifice of brick was erected for the accommodation of the institution. The *Miami university* is endowed with one township of land, which produces at present an annual income of nearly 4,000 dollars. The funds are daily increasing in value, and the erection of buildings for the accommodation of the institution has already commenced. The *Cincinnati college* was incorporated in 1819, and is the most flourishing literary institution in the state. It has funds, amounting to 30,000 dollars, raised by private subscription. A medical college is connected with it. *Worthington college* was incorporated in 1819. All these institutions are yet in their infancy.—One section, or thirty sixth part, of every township has been granted by the government of the U. States for the support of common schools. There are also 10 incorporated academies in the state.

Population.] The population has increased with astonishing rapidity. In 1791, it was 3,000; in 1800, 42,156; in 1810, 230,760; and in 1820, 531,434, none of whom were slaves. The inhabitants are made up of emigrants from every state in the Union, and from almost every country in Europe. They have not resided together long enough to form a fixed and uniform character. The majority of the emigrants have been farmers from the northern and middle states, who are in general industrious, temperate, and frugal, and possess much intelligence and enterprise. The population will probably continue to increase rapidly for some time to come; though not with the same rapidity as heretofore. The recent extinction of the Indian title to the northwestern quarter of the state, called the Indian reservation, will have an immediate effect on the progress of population in that quarter.

Religion.] The Presbyterians and Methodists are the prevailing denominations. In the southwestern parts of the state, and in some other places, there are a few Shakers and Quakers or Friends. There are also a few of almost every other denomination.

Government.] Ohio was admitted into the union in 1803. The legislative power is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen for one year, and their number cannot be less than 36 nor more than 72. The senators are chosen for two years, and their number must not be more than one half, nor less than one third of the number of representatives. The executive power is vested in a governor, who is chosen for two years by the people.

Antiquities.] The monuments of the ancient population of Ohio consist of fortifications, and mounds or embankments, of various forms and dimensions. Among them all, there is not a single edifice, nor any ruins which prove the existence, in former ages, of a building composed of imperishable materials. No fragment of a column, no brick, nor a single hewn stone, large enough to have been incorporated into a wall has been discovered. The mounds of earth are found interspersed over almost the whole face of the country; but the forts, as they are called, are not so numerous.

The mounds vary greatly in shape and magnitude: some are of a conical figure, ending on the top in a point, and as steep on the sides, as the earth could be made to lie; others are of the same form except that they present a flat area on the top, like a cone cut off at some distance from its vertex, by a plane parallel with its base; and others again are of a semiglobular shape. The fortifications consist of a circular wall, composed of earth, and usually very steep on the sides. Their height is various; some are so low as to be scarcely perceptible; some are from 20 to 30 feet in perpendicular height; while others again are of an intermediate elevation. The walls are generally single, but, in a few instances, they consist of two, which are parallel and adjacent to each other. The space inclosed within the walls varies from a few perches to nearly 100 acres. The number of entrances or gateways varies in different forts from one to eight or more, according to the magnitude of the inclosure.

Mounds and fortifications of the above description are not confined to the state of Ohio, but are found scattered over the whole country west of the Alleghany mountains from the great lakes on the north nearly to the southern extremity of North America. They are found of the greatest magnitude and grandeur in some of the southern provinces of Mexico. From that country, indeed, they seem to decrease in size, beauty and regularity, in a ratio corresponding directly to the distance. They are generally found in the vallies of the larger streams; and on the most elevated plains or terraces, which are provincially termed the second and third banks, counting from the river. They are undoubtedly of great antiquity: the forests over them exhibit no appearance of more recent growth than in other places. Trees, several hundred years old, are in many places seen growing out of the ruins of others, which appear to have been of equal size. There have been various conjectures concerning the time when these monuments were erected, the people by whom they were built, and the design of their erection. Those called forts are generally in the strongest military positions of the country, and were perhaps, without exception, designed for defence in war. The mounds were probably burying places, as human bones have frequently been discovered in them.

Commerce and Manufactures.] The principal exports from this state are horses, cattle, swine, whiskey and flour. Large herds of swine are driven in the autumn to Philadelphia, Balti-

more and other eastern markets; Detroit and other military posts on the northern frontier are also supplied with provisions principally from Ohio. The markets for the northern part of the state and for many of the interior counties are Montreal and New-York. In all the southern part of the state the produce is boated down the Ohio and Mississippi rivers to New-Orleans. The value of the manufactures of this state, in 1810, was \$2,894,290.

INDIANA.

Situation and Extent.] Indiana is bounded N. by the state of Illinois, lake Michigan and Michigan-territory; E. by the state of Ohio; S. by Kentucky; and W. by the state of Illinois. The boundary line commences in Ohio river at the mouth of the Wabash, and proceeds up the last mentioned river to the point where the meridian of Vincennes cuts the river for the last time; thence, north, along that meridian, to a point 10 miles north of the southern extremity of lake Michigan; thence, due east, to the point of intersection with the western line of the state of Ohio; thence, south, along that line, to the mouth of the Great Miami; and thence, down the Ohio, to the place of beginning. It extends from 37° 45' to 41° 50' N. lat. and from 84° 42' to 87° 43' W. lon. The area is estimated at 36,000 square miles.

Divisions.] The northern half of the state is in possession of the Indians. The part occupied by the whites is divided into 35 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>
Clark,	3,709	Charlestown.	Owen,	838	
Crawford,	2,583		Perry,	2,330	Troy.
Davies,	3,432	Washington.	Pike,	1,472	
Dearborn,	11,468	Lawrenceburg	Posey,	4,061	Harmony.
Delaware,	3,677		Randolph,	1,808	
Dubois,	1,168		Ripley,	1,822	
Fayette,	5,950		Scott,	2,334	
Floyd,	2,776		Spencer,	1,882	
Franklin,	10,763	Brookville.	Sullivan,	3,498	Fort Harrison.
Gibson,	3,876	Princeton.	Switzerland,	3,934	Vevay.
Harrison,	7,875	Corydon.	Vanderburgh,	1,798	
Jackson,	4,010	Brownstown.	Vigo,	3,390	
Jefferson,	8,038	Madison.	Wabash,	147	
Jennings,	2,000	Vernon.	Warwick,	1,749	Darlington.
Knox,	5,437	Vincennes.	Washington,	9,039	Salem.
Lawrence,	4,116		Wayne,	12,119	Salisbury.
Martin,	1,032				
Monroe,	2,679				
Orange,	5,368	Paoli.			
			Total,	147,178	

Rivers.] The *Ohio* forms the southern boundary of the state, from the mouth of the Great Miami to that of the Wabash.

The *Wabash* rises in the northeastern part of the state, and flowing in a southwesterly direction, falls into the *Ohio* 30 miles above the mouth of *Cumberland* river, after a course of 500 miles, for the last 250 of which it forms the boundary between *Indiana* and *Illinois*. It is navigable for keel boats 400 miles, to *Onitanon*, where there are rapids. Above the rapids small boats can ascend nearly to its source. The current is gentle above *Vincennes*; below that town there are several rapids, but not of sufficient magnitude to prevent boats from ascending. Its principal tributaries from this state, are, 1. *White river*, which rises in the eastern part of the state, and running in a southwesterly direction through nearly the whole breadth of the state, parallel with the *Ohio*, at the distance of from 40 to 60 miles, receives a large branch from the north, and soon after discharges itself into the *Wabash*, 16 miles below *Vincennes*. 2. The *Tippecanoe*, which rises in the northern part of the state, and running in a southerly direction, joins the *Wabash* 140 miles above *Vincennes*. The banks of this river are celebrated for a severe battle fought in November 1811 between the United States' troops and the *Indians*, in which the former were victorious.

Whitewater river rises in this state, and running in a S. E. direction, receives numerous tributaries, and falls into the *Miami*, in *Ohio*, 5 miles above the junction of that river with the *Ohio*. It is a beautiful transparent stream, and abounds with fine seats for mills, many of which are already erected upon it. It can easily be made navigable to *Brookville*, 20 miles from its mouth.

St. Mary's river rises in the state of *Ohio*, near the sources of the *Miami*, and running in a direction west of north, for 70 miles, joins the *St. Joseph's river*, at *Fort Wayne*, in this state, to form the *Maumee*. It is navigable for boats nearly to its source, from which there is only a short portage to *Loramie's creek*, a branch of the *Miami*.

Face of the Country, Soil and Productions.] A ridge of hills commences near the mouth of the *Wabash*, and runs in a N. E. direction, nearly parallel with the *Ohio*, at no great distance, producing a broken and uneven country. North of these hills lie the flat woods, 70 miles wide. Bordering on all the principal streams, except the *Ohio*, there are strips of bottom and prairie land, of a rich soil, and usually from 3 to 6 miles in width. The prairies on the *Wabash*, are the finest land in the state. Remote from the rivers the country is broken and the soil light. Between the *Wabash* and lake *Michigan*, the land is mostly level, and interspersed with woodlands, prairies, lakes and swamps.

The principal productions are wheat, Indian corn, oats, rye, flax, hemp, potatoes and tobacco. In the southeastern part of the state, near *Vevay*, on the *Ohio*, the vine is cultivated with success. On the banks of the *Wabash*, in the upper part of its course, the best kind of coal is found in inexhaustible quantities.

and near the sources of several of the navigable rivers, there are salt springs from which salt inabundance may be procured. Near Corydon, in the southern part of the state, is a large cave abounding with Epsom salts and saltpetre.

Chief Towns.] Vincennes, the largest town, is on the east bank of the Wabash, 100 miles from its junction with the Ohio, in a direct line, but nearly 200 by the course of the river. The settlement was commenced about a century ago by the French from Lower Canada, many of whom intermarried with the Indians, and gradually approximated to the savage state. Within a few years American emigrants have flocked hither in great numbers, and the society is rapidly improving. In 1810 the population was 883, and in 1818 the town contained 250 dwelling houses and stores; a bank, with a capital of \$1,500,000; and a college.

Madison, the capital of Jefferson county, is on the Ohio, 45 miles above the falls, and 75 below Cincinnati. It has grown very rapidly for several years past, and is now the second town in size in the state. The population, in 1819, was estimated at 1,300.

Corydon, the temporary capital of the state, is on Indian creek, 15 miles from its junction with the Ohio, and 27 west of Louisville in Kentucky. It is to be the seat of government till 1825. Population, in 1819, about 1,000. Jeffersonville is on Ohio river, just above the falls, and opposite Louisville in Kentucky. A company has been incorporated to cut a canal around the falls, on the Indiana side of the river, commencing just above this place. Should this canal be formed, Jeffersonville would become a place of importance. Vevay, the capital of Switzerland county, is pleasantly situated on the Ohio, nearly equidistant from Cincinnati, Lexington and Louisville, 45 miles from each. The inhabitants are emigrants from Switzerland. In 1814 the site of the town was a forest, but in 1817 it contained 84 dwelling houses, a courthouse, jail, market-house, church and printing office. Half a mile below the village are the Swiss vineyards, where the culture of the vine has been successfully introduced.

Inland Navigation.] About 8 miles from fort Wayne, in the northeast part of the state, one of the branches of the Wabash approaches within a short distance of St. Mary's river, a navigable branch of the Maumee which falls into lake Erie. When the waters are very high these rivers overflow the intervening lands to such a depth, that loaded boats pass over with facility. Of the practicability, therefore, of connecting them by a canal there can be no doubt; and in a law of Congress appropriating a portion of the public lands to the improvement of inland navigation, 100,000 acres were assigned for defraying the expense of this project.

Education.] In the act of Congress admitting this state into the Union, one section, or thirty sixth part, of each township was given for the support of schools. One entire township, or 23,040, acres, said to be worth, on an average, 10 dollars an

acre, was also given for the support of a college. The college is located at Vincennes, and a large brick building is already erected.

Population.] The population in 1800 was 2,500; in 1810, 21,520; in 1815, 63,784; and in 1820, 147,173, of whom 190 were slaves and 1,230 free blacks. A majority of the inhabitants are from Kentucky, Tennessee, Virginia, and the Carolinas; the remainder are from every other state in the Union, and from almost every nation in Europe. The Indian title to large tracts of fine land has been recently extinguished by the United States, and the number of immigrants is, in consequence, rapidly increasing.

Government.] The legislative power is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen annually by counties, and their number can never be less than 36 nor more than 100. The senators are chosen for three years, and their number can never be less than one third, nor more than one half of the number of representatives. The executive power is vested in a governor, who is chosen by the people for three years, but he cannot hold his office longer than six years in any term of nine years.

Judiciary power.] The judiciary power is vested in a supreme court and such inferior courts as the general assembly may, from time to time, direct and establish. The judges of the supreme court are appointed by the governor, with the advice and consent of the senate. The judges of the inferior courts are chosen partly by the general assembly, and partly by the people in their respective counties. The justices of the peace are elected by the people in the several towns, and hold their offices for five years. The judges of the supreme court as well as of the inferior courts hold their offices for seven years.

ILLINOIS.

Situation and Extent.] Illinois is bounded N. by the North-west territory; E. by lake Michigan and Indiana; S. by Kentucky; and W. by Mississippi river, which separates it from the state of Missouri and Missouri territory. The boundary begins in Ohio river at the mouth of the Wabash, and proceeds, thence, up the same, and with the line of Indiana, to the north-west corner of said state; thence, east, with the line of the same state, to the middle of lake Michigan; thence, north, along the middle of said lake, to the parallel of $42^{\circ} 30'$ N. lat.; thence, west, along that parallel, to the middle of the Mississippi river; and thence, down along the middle of that river, to its confluence with the Ohio river; and thence, up the latter river, along its north-western shore, to the place of beginning. It extends from 37° to 42°

36° N. lat., and from 87° 17' to 91° 50' W. lon. The area is estimated at 52,000 square miles.

Divisions.] Illinois is divided into 19 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Chief towns.</i>
Alexander,	626	America.	Monroe,	1,537	Harrisonville.
Bond,	2,951	Perryville.	Pope,	2,610	Golconda.
Clark,	931		Randolph,	3,492	Kaskaskia.
Crawford,	3,022		St. Clair,	5,253	Belleville.
Edwards,	3,444	Palmyra.	Union,	2,362	Jonesburg.
Franklin,	1,763		Washington,	1,517	Covington.
Gallatin,	3,165	Shawneetown.	Wayne,	1,114	
Jackson,	1,542	Brownsville.	White,	4,328	Carmi.
Jefferson,	691				
Johnson,	843	Vienna.	Total,	55,211	
Madison,	13,550	Edwardsville.			

Rivers.] This state is well provided with navigable waters. It is bordered on three sides by the great rivers *Wabash*, *Ohio* and *Mississippi*; its N. E. corner touches upon lake Michigan, and it is intersected by the *Illinois* and *Kaskaskia*, which run from N. E. to S. W. through the heart of the state.

The *Illinois* is formed by the *Kankakee* and the *Desplanes*, which unite in the N. E. part of the state. After their union, the river runs in a S. W. direction nearly 400 miles, and falls into the *Mississippi* 18 miles above the mouth of the *Missouri*. It has a gentle current, and is navigable for boats nearly to its source. The *Illinois* has numerous tributaries, several of which are navigable for boats more than 100 miles.

The *Kaskaskia* rises in the eastern part of the state, between the *Illinois* and *Wabash*, and running in a south-westerly direction, falls into the *Mississippi* 84 miles below the mouth of the *Illinois*, after a course of 150 miles, for 130 of which it is navigable.

The other considerable rivers, beginning in the N. W. are,
1. *Rocky river*, which rises near the northern boundary of the state, and running in a S. W. direction, enters the *Mississippi* 160 miles above the mouth of the *Illinois*, after a course of 200 miles.
2. The *Au Vase*, which runs into the *Mississippi*, 55 miles above the mouth of the *Ohio*. It is navigable for boats 60 miles.
3. *Saline river*, which empties itself into the *Ohio*, 26 miles below the mouth of the *Wabash*. It is navigable 30 miles. There are salt works, belonging to the United States, on this stream, 20 miles from its mouth.
4. The *Little Wabash*, which runs into the *Wabash*, a few miles from *Ohio river*, after a southerly course of more than 100 miles.
5. The *Chicago*, which empties itself into lake Michigan, at its southern extremity. The portage from *Chicago river* to the *Desplanes*, one of the head branches of the *Illinois*, is only 9 miles, and the land here is so low as often to be covered with water and passed in boats.

Face of the Country, Soil and Productions.] The greater part of the state is either flat or rolling. Extensive prairies are

spread over two thirds of its surface. The soil may be divided into six classes. 1. Bottoms, bearing a heavy growth of timber. This land is of the first quality, and is found on all the principal rivers. It varies in width from 50 rods to 2 miles, and is of inexhaustible fertility. 2. Newly formed land, found at the mouths of rivers. There are many thousand acres of this land at the mouth of the Wabash, and at the confluence of the Ohio with the Mississippi. It is annually inundated, and is very unhealthy. 3. Dry prairies, near the rivers, bordering on the bottom land, but elevated from 30 to 100 feet. The prairies of the Illinois river are the most extensive of any east of the Mississippi, and have alone been estimated at 1,200,000 acres. This soil is not inferior to the first rate river bottoms. 4. Wet prairie, found remote from rivers or at their sources. The soil is generally cold and barren, abounding with swamps and ponds, and covered with a tall coarse grass. 5. Timbered land, moderately hilly, well watered, and of a rich soil. 6. Hills, of a sterile soil, and destitute of timber, or covered with stunted oaks and pines.

Corn is at present the staple production. Wheat does well, except on the bottoms, where the soil is too rich. Tobacco grows to great perfection. Flax, hemp, oats, Irish and sweet potatoes do as well as in Kentucky.

Military Bounty Lands.] In 1817 there were in Illinois upwards of 16,000,000 acres of land belonging to the United States, obtained by purchase from the Indians. The portion of these lands lying between the Illinois and the Mississippi has been assigned by Congress, as bounty lands, to the soldiers who enlisted during the late war. The whole amount surveyed is about 5,530,000 acres, equal to 8,640 square miles, and is divided into 240 townships. This land is represented to be of an excellent quality.

Chief Towns.] *Kaskaskia*, the seat of government, is on the right bank of Kaskaskia river, 11 miles from its mouth, and 150 S. W. of Vincennes. It contains about 160 houses scattered over an extensive plain. The town was settled upwards of 100 years ago from Lower Canada, and about one half of the inhabitants are of French origin.

Cahokia is on a small river of the same name, which discharges itself into the Mississippi one mile below the town, 4 miles south of St. Louis, on the opposite side of the river, and 52 N. W. of Kaskaskia. It contains about 1,000 inhabitants, most of whom are of French origin.

Shawneetown, the capital of Gallatin county, is on the north bank of Ohio river, 12 miles below the mouth of the Wabash, and 12 E. of the salt works belonging to the United States, on Saline creek. The inhabitants are supported principally by the profits of the salt trade.

Edwardsville, the capital of Madison county, is a flourishing town, on Cahokia river, 22 miles N. E. of St. Louis. *Cairo* is situated at the junction of the Ohio with the Mississippi.

Canals and Roads.] A canal has been projected to unite the head waters of the Illinois with lake Michigan. The Illinois, and the Chicago, a river of lake Michigan, are so connected, that in freshets boats pass readily from one to the other. For the improvement of this navigation the government of the United States has appropriated 100,000 acres of land. This canal will open, probably at less expense than any other, a communication between the great lakes and the Mississippi; but as there are no settlements of any importance on the shores of lake Michigan, it will probably be some time before this communication will be opened.

Two per cent. of the nett proceeds of the United States' lands, lying within the state, are to be expended under the direction of Congress, in making roads leading to the state.

Education.] At the time of the admission of Illinois into the Union, in 1818, the government of the United States granted to the state, on certain conditions, one section or thirty-sixth part of every township for the support of schools; and three per cent. of the nett proceeds of the United States' lands, lying within the state, for the encouragement of learning, of which one sixth part must be bestowed on a college or university. As a farther provision for the university, two entire townships have been given to the legislature.

As the condition of these grants, the convention, which formed the constitution of the state, was required to provide, by an ordinance which is irrevocable without the consent of Congress, that all lands sold by the United States shall be exempt from every species of taxation for five years from the day of sale; also, that the bounty lands granted for military services during the late war, shall, if they continue to be held by the patentees, or their heirs, remain exempt from taxes for three years from the date of the patents; and that the lands belonging to the citizens of the United States residing without the state, shall never be taxed higher than lands belonging to persons residing therein.—Similar provisions are required of all the new states as the condition on which they receive grants of land and money for the support of schools, roads and canals. It is also usually required that all the navigable waters of the state shall be common highways, and for ever free of toll or duty to all citizens of the United States.

Population.] The population has increased very rapidly within a few years. In 1810 it was 12,282; in 1818, 35,220; and in 1820, 55,211; of whom, 917 were slaves. The settlements at present are principally confined to the banks of the Mississippi, the Kaskaskia and its branches. There are a few also on the Wabash and the Ohio. The constitution provides that no more slaves shall be introduced into the state.

Indians.] There are about 15,000 Indians in this state and Indiana. The principal tribes are the *Sacs*, 3,400 in number, on Rocky river, 4 miles E. of the Mississippi, and 400 above St. Louis; the *Pottawatamies*, 2,000 in number, around the southern part of lake Michigan; the *Delawares* and several other tribes, on

White river in Indiana ; and the *Miamies* and *Eel river Indians*, in Indiana, on branches of the Wabash.

Government.] The legislative power is vested in a general assembly consisting of a senate and house of representatives. The representatives are chosen for two years and the senators for four years. The number of representatives cannot be less than 27 nor more than 36, until the number of inhabitants shall amount to 100,000 ; and the number of senators can never be less than one third nor more than one half of the number of representatives. The executive power is vested in a governor, who is chosen by the people for four years, but he is not eligible for more than four years in any term of eight years. In all elections, every white male inhabitant, having resided in the state six months, is allowed to vote, and the constitution requires that all votes shall be given *viva voce*.

Judiciary power.] The judiciary power is vested in a supreme court and such inferior courts as the general assembly shall from time to time ordain and establish. The judges are appointed by the assembly and hold their offices during good behaviour, or till removed by the governor on the address of two thirds of each branch of the general assembly.

Minerals.] Copper and lead are found in some parts of the state. Coal has been discovered on the banks of Au Vase river ; on the Illinois, 260 miles from its mouth, and in places near Kaskaskia and Edwardsville. Salt is made at the United States' saline, on Saline river, to the amount of 200,000 bushels annually, and is sold at the works for 50 and 75 cents a bushel. These salt works supply the states of Indiana and Illinois.

MISSOURI.

Situation and Extent.] Missouri is bounded E. by Mississippi river, which separates it from Illinois, Kentucky, and Tennessee ; S. by Arkansas territory ; W. and N. by Missouri territory. The boundary line runs as follows : beginning in the Mississippi river in lat. 36° N. it runs due west along that parallel to the river St. Francis ; thence, up that river, to the parallel of 36° 30' north latitude ; thence, west, along that parallel, till it meets the meridian, which passes through the mouth of Kansas river ; thence, north, along that meridian, till it meets the parallel of latitude, which passes through the mouth of Des Moines river ; thence, east, along that parallel to the Mississippi river ; and thence, down the middle of the Mississippi to the place of beginning. It extends from 36° to about 40° 30' N. lat. and from 89° to 94° 10' W. lon. The area is estimated at 60,000 square miles.

Divisions.] The state is divided into 15 counties.

<i>Counties.</i>	<i>Pop. in 1820.</i>	<i>Slaves in 1820.</i>	<i>Chief towns.</i>
Cape Girardeau,	5,968	865	Jackson.
Cooper,	6,959	637	
Franklin,	2,379	291	
Howard,	13,426	2,089	Franklin.
Jefferson,	1,835	212	Herculaneum.
Lincoln,	1,662	242	
Madison,	2,047	371	Fredericktown.
Montgomery,	3,074	526	
New Madrid,	2,296	291	Winchester.
Pike,	3,747	676	
St. Charles,	3,970	682	St. Charles.
St. Genevieve,	4,962	983	St. Genevieve.
St. Louis,	10,049	1,810	St. Louis.
Washington,	2,769	425	Potosi.
Wayne,	1,443	204	
Total,	66,586	10,222	

Rivers.] The *Mississippi* washes the eastern boundary of the state from the mouth of the Des Moines almost to that of the St. Francis, a distance of more than 500 miles. The *Missouri* crosses the western boundary, and running in an easterly direction through the heart of the state, discharges itself into the *Mississippi*, 18 miles below the mouth of the *Illinois*, and 193 above that of the *Ohio*.

The principal tributaries of the *Mississippi* from this state, are,
1. *Salt river*, which joins it 73 miles above the mouth of the *Illinois*, after a course of several hundred miles, for 200 of which it is navigable. 2. The *Missouri*. 3. The *Merrimack*, which enters it 18 miles below St. Louis, after a N. E. course of more than 300 miles. It is only navigable about 50 miles, except in high floods in the spring and fall, when most of its tributaries may be ascended with boats.

The principal tributaries of the *Missouri* from this state, are,
1. The *Gasconade*, which enters it about 100 miles from its confluence with the *Mississippi*, after a northerly course of 200 miles. The current is rapid, and affords by its fall many mill seats; boats and rafts may descend with ease, but the ascent is attended with great labor. 2. the *Osage*, which rises in *Missouri* territory near the 96th degree of west longitude, about 100 miles north of the banks of the *Arkansas*, and after meandering in an east and north-east direction for a distance of 900 miles, unites with the *Missouri*, 133 miles from its confluence with the *Mississippi*. It is navigable for boats 600 miles. 3. *Grand river*, which rises in *Missouri* territory, and running in a southeasterly direction, joins the *Missouri* about 100 miles above the mouth of the *Osage*. It is navigable for boats 600 miles.

Black river rises near the sources of the *Merrimack* and the *Gasconade*, and running in a southerly direction is joined by *Current*, *Thomas*, *Spring* and *Strawberry* rivers, after which it

crosses the southern boundary of the state into Arkansas territory and forms a junction with White river.

The *St. Francis* rises in the southeastern part of the state, and running in a southerly direction into Arkansas territory, falls into the Mississippi after a course of 500 miles. The navigation is obstructed by a raft of trees, brush, &c. about 250 miles from its mouth.

Face of the Country.] The lands immediately on the banks of the rivers are level, but as you recede from them towards the interior, the country rises, passing sometimes gradually and sometimes abruptly into elevated barrens, flinty ridges and rocky cliffs. This portion of the state is, therefore, unfit for cultivation; but it is rich in mineral treasures. The highest land is in a ridge which commences on the banks of the Merrimack, near the head waters of the *St. Francis*, and extends in a south-west direction to the banks of the White river, in Arkansas territory, a distance of about 400 miles, and occasionally rises into peaks of mountain height. This ridge serves to divide the waters of the Missouri from those of the Mississippi, the streams on one side running south into the latter, and those on the other, running north into the former.

Soil.] The soil is either very rich or very poor; it is either bottom land or cliff, either prairie or barren; there is very little of an intermediate quality. The lands immediately upon the banks of the rivers are generally rich, producing corn, wheat, rye, oats, flax, hemp and tobacco in great abundance.

The lands bordering on the Missouri, during its whole progress through this state, are rich beyond comparison. They consist of a stratum of black alluvial soil, of unknown depth, partaking largely of the properties of marl, and covered with a heavy growth of forest trees.

The banks of the Gasconade afford but a small proportion of arable lands, being bordered with rocks and sterile hills. The rocks are, however, cavernous and afford saltpetre, and the hills are covered with pine timber, which is sawed into boards and plank. In these two articles the commerce of the river will always principally consist. On this stream are already situated several saw mills, where boards and plank are cut for the St. Louis market, and several saltpetre caves are worked.

Osage river affords in its whole length large bodies of the choicest prairie land, interspersed with wood land, and occasionally with hills. Its banks afford also exhaustless beds of coal, and some iron and lead are found. A part of the country on this river has been recently purchased by the United States from the Indians, but there are as yet few settlements of whites.

The lands on Salt river are noted for their fertility, and the settlements on its banks are rapidly progressing. Much of the land on the Merrimack is poor; and near its sources are large forests of pines.

There is much excellent land on the *St. Francis*, mixed with some that is rocky, and bordered, near its mouth, with much that

is swampy, low, and overflowed. The banks of Black river, and of all its tributaries, afford strips of rich alluvial land.

Climate.] Situated between the 36th and 40th degrees of north latitude, the state of Missouri enjoys a climate of remarkable serenity and temperate warmth. It is equally exempted from the hot summers of the south and the cold winters of the north, a medium happily calculated to favor the pursuits of agriculture, commerce and navigation. A clear blue sky is characteristic of the country, and an atmosphere of unusual dryness exempts the inhabitants from those pulmonary complaints which are so frequent in some of the Atlantic States.

Productions.] The climate is favorable to the productions of the vegetable kingdom, and it would be difficult to point out a section of country which affords a more interesting field for the botanist. The prairies and barrens are covered with a profusion of wild flowers, shrubs and plants, and the cultivated fields yield to the planter a great proportion of the useful vegetables of the earth. Corn succeeds remarkably well: no country surpasses the banks of the Missouri for the vigor of its crops. Wheat, rye, oats, flax, and hemp are also raised with advantage. Tobacco is an article recently introduced, but is found to succeed well, and the lands are said to be as well adapted to its growth as those of Kentucky and Virginia. Cotton is raised in the southern part of the state for family use, but is not an advantageous crop for market. The climate and soil are also adapted to the growth of the sweet or Carolina potatoe, and to fruit trees of various kinds. The luxuriant growth of grass in the woods affords ample range for cattle and horses, and they are constantly kept fat. Hogs also are suffered to run at large, and in the fall are killed from the woods. There is perhaps no country in the world where cattle, hogs and sheep can be raised with so little trouble and expense as in some parts of this state.

Minerals.] The most remarkable feature in Missouri is its lead mines, which are probably the most extensive on the globe. They occupy a district between 37° and 38° N. lat. and 89° and 92° W. lon. extending in length from the head waters of St. Francis river in a N. W. direction to the Merrimack, a distance of 70 miles; and in breadth from the Mississippi, in a S.W. direction, 45 miles. They comprise a considerable part of the counties of Washington, Genevieve, Jefferson and Madison, and cover an area of more than 3,000 square miles. The ore is of the richest and purest kind, yielding in the large way from 60 to 70 per cent. of pure metal. It exists in quantities sufficient to supply all the demands of the United States, and allow a large surplus for exportation. The processes of working the mines have hitherto been very imperfect, and conducted without skill, system or economy; yet Mr. Schoolcraft estimates the annual produce at more than 3,000,000 pounds, which at four cents a pound is worth \$120,000. The number of mines now worked is 45, and the number of men employed is more than 1,100.

Chief Towns.] *St. Louis*, the capital of St. Louis county, and the largest town in the state, stands on the west side of the Mis-

issippi, 18 miles below the mouth of the Missouri, 200 above the mouth of the Ohio, and 1,200 above New Orleans. The situation, in point of beauty, health and convenience, is rarely equalled. The bank of the river ascends gradually from the landing to the rear of the town, where it terminates in a plain which extends for 15 miles around, and consists of a stratum of rich alluvial soil, bottomed on limestone rock. The houses are principally built on three parallel streets, which extend more than 2 miles along the river, and rise each above the other.

No inland town in the world is more advantageously situated for commerce than St. Louis. It is near the point where several of the largest rivers in America unite their waters. It is the natural depot for the vast and fertile regions watered by the Missouri, the Upper Mississippi, the Illinois, and their numerous tributaries; rivers, which traverse the continent for thousands of miles in various directions, and along whose banks the tide of population is now rolling with unexampled rapidity. Measures have already been taken by the government of the United States to divert the fur trade of the north-west regions and the Upper Missouri, [which has been heretofore engrossed by British traders and carried on through the lakes and Montreal,] into its natural channels, the Mississippi and Missouri, and whenever it is accomplished, St. Louis will be the centre of this profitable commerce. Intercourse by steam-boats is now constantly maintained with the towns on the Ohio and Mississippi, particularly with New-Orleans. The town is in a state of very rapid improvement. Population, in 1816, 2,000; in 1820, 4,598.

Herculanum, the capital of Jefferson county, is on the Mississippi, 30 miles below St. Louis, and 36 from the centre of the lead mine country. Here are store-houses for the lead, and several shot towers, where shot is made. The value of lead exported from this place in 13 months, ending in June, 1818, was \$170,000.

St. Genevieve, the capital of the county of the same name, is on the Mississippi, 30 miles below *Herculanum*. It is one of the principal lead markets, and before the settlement of *Herculanum*, all the lead made at the mines was shipped from this place.

St. Charles is a handsome and flourishing town, on the north side of the Missouri, 21 miles from its mouth, and 18 N. W. of St. Louis. It was originally settled by the French, but there are now many American settlers.

Franklin, the capital of Howard county, is on the Missouri, and is surrounded by one of the richest tracts of land west of the Alleghany mountains. Emigrants are now flocking to this country in great numbers.

Potosi, the capital of Washington county, is 60 miles W. S. W. of St. Louis, and 45 W. of St. Genevieve. It is in the centre of the mining district. Within a circle of 20 miles around it, there are about 40 lead mines.

Among the other towns are *Cape Girardeau*, on the Mississippi 20 miles above the mouth of the Ohio; *New Madrid*, on the Mississippi, 70 miles below the mouth of the Ohio; and *Caron-*

dalet, on the Mississippi, 6 miles below St. Louis, and nearly opposite Cahokia in Illinois.

Population.] The population, in 1810, was 20,657; in 1820, exclusive of Indians, 66,586, of whom 10,222 were slaves. Most of the inhabitants are immigrants, who have arrived within the last seven years. They consist of people from various parts of the United States and from Europe. A large proportion are from Tennessee, Kentucky, New-York, and New-England. The original inhabitants were French and Spanish. There are few of the latter remaining, but the former constitute a respectable proportion of the population.

Education and Internal improvement.] Missouri was admitted into the Union in 1821. In the act of admission, Congress granted to the state one section or thirty sixth part of every township for the support of common schools; and one township for the support of a college. Five per cent. of the nett proceeds of the sale of public lands was also appropriated to making roads and canals, for the benefit of the state.

Antiquities.] Several skeletons were discovered in the fall of 1818, on the banks of the river Merrimack, which indicate a stature unusually small, and are supposed by many to be the remains of an extinct race of human beings, of dwarfish origin, who inhabited the country at a former period. None of the graves exceed four feet in length, and some are less than two feet. In one, which by actual measurement, was only 23 inches, the teeth of the skeleton indicated that the person had arrived to the age of maturity.

Commerce.] The exports are lead, shot, whiskey, flour, corn, hemp, flax, tow cloth, furs and provisions. Horses also may be ranked among the exports, considerable droves being annually driven off to Kentucky, Red river and other places.—Commerce is now carried on chiefly with the cities of New-Orleans, Philadelphia, New-York and Pittsburgh. The lead is taken down the Mississippi in boats to New-Orleans, and there either sold, or shipped to Philadelphia or New-York. The dry goods with which this country is supplied are principally purchased at Philadelphia, and transported across the Alleghany mountains to Pittsburgh, and thence taken down the Ohio and up the Mississippi in boats. The groceries are principally purchased at New-Orleans, and brought up in boats. Steam boats have lately engrossed this business, and should they continue to multiply at the rate now indicated, will in a few years throw keel boats and barges entirely out of employment.

MICHIGAN TERRITORY.

Situation and Extent.] Michigan territory is bounded N. by lake Superior; E. by lakes Huron, St. Clair and Erie; S. by Ohio and Indiana; and W. by the Northwest territory. On the

north and east, the boundary is the same with that of the United States; on the south it is the same with the northern boundaries of Ohio and Indiana; on the west, the line begins at the southern extremity of lake Michigan, and runs due north to lake Superior. The territory extends from $41^{\circ} 31'$ to $46^{\circ} 39'$ N. lat. and from 82° to about 86° W. lon. It is 350 miles long from north to south, and 212 broad on the southern boundary. The area is estimated at 40,000 square miles.

Divisions.] The territory is divided by lake Michigan into two parts. The eastern and much the largest division is a peninsula, bounded on three sides by lakes Michigan, Huron, St. Clair and Erie, and on the south side by the states of Ohio and Indiana. The western division is also a peninsula, inclosed between lake Superior, lake Michigan and the western boundary of the territory. The part of Michigan to which the Indian title has been extinguished is a tract in the S. E. along the banks of lake Erie, lake St. Clair, and lake Huron, extending as far north as Thunder bay river, and back to the westward about 80 miles; besides some small tracts at the head of Green bay, at the straits of St. Mary, and around Michillimackinac. In 1820 the territory was divided into 7 counties.

<i>Counties.</i>	<i>Pop in 1820.</i>	<i>Chief towns.</i>
Brown,	952	Green bay settlement.
Crawford,	492	
Macomb,	898	Mount Clemens.
Michillimackinac,	819	Michillimackinac.
Monroe,	1,831	Monroe.
Oakland,	330	Pontiac.
Wayne,	3,574	Detroit.
<hr/>		
Total,	8,896.	

Lakes and Bays.] *Lake Michigan* lies wholly within this territory. It is 260 miles long, 55 broad and 800 in circumference, containing, according to Hutchins, 16,200 square miles. On the N. E. it communicates with lake Huron through the straits of Michillimackinac, and on the N. W. it branches out into two bays, one called *Noyes's bay*, and the other *Green bay*. The lake is navigable for ships of any burden. Green bay extends in a S. W. direction 90 miles, and is 15 or 20 miles wide. It is navigable for vessels of 200 tons.

Lake Huron lies partly in this territory and partly in Upper Canada. On its N. W. side it receives the waters of lake Superior through the river St. Mary's, and is connected with lake Michigan by the straits of Michillimackinac. It discharges itself at its southern extremity, through St. Clair river, into lake St. Clair. *Sagonee bay* sets up from the lake in a southerly direction, between Point aux Barques on the south, and Point au Sable on the north. It is 60 miles long, and 30 wide at its mouth.

Lake St. Clair, lying between lake Huron and lake Erie, is about 90 miles in circumference. It receives the waters of lake

Huron through St. Clair river, and discharges itself into lake Erie through Detroit river. *Lake Erie* touches upon the territory in the S. E.

Rivers.] St. Mary's river or strait, which connects lake Superior with lake Huron, is about 80 miles long. The fall, or Sault de St. Marie, is near the head of the strait, fifteen miles from lake Superior. The river here descends 22 feet 10 inches in 900 yards, and cannot be ascended at any season with large vessels, but canoes and barges are towed up along the bank without much difficulty or danger. The Indians are drawn hither in great numbers by the advantages for taking white-fish, which are so abundant at the foot of the rapids, that a skilful fisherman will take 500 in two hours.

The principal rivers which discharge themselves from the eastern shore of the territory are, 1. *Saganaw river*, a large and deep stream which falls into Saganaw bay, at its southern extremity. 2. The *Huron*, which discharges itself into lake St. Clair, 20 miles north of Detroit, after an easterly course of 60 or 70 miles. 3. The *Raisin*, which runs into lake Erie, 15 miles from the mouth of Detroit river, after an easterly course of 60 or 70 miles. It is navigable for small vessels 7 miles, to Monroe, where there are rapids.

Numerous small rivers discharge themselves into lake Michigan from its eastern shore, the most noted of which are, 1. *St. Joseph river*, which rises in Indiana, near the sources of the Maumee, and running in a north-westerly direction falls into the lake near its southern extremity; and, 2. *Grand river*, which rises near the sources of the Saganaw and the Raisin, and running in a westerly direction falls into the lake about 60 miles north of the St. Joseph: it is navigable for boats nearly to its source, and a canal, connecting it with Saganaw river, it is said could be opened at a small expense.

Face of the Country, Soil and Productions.] A ridge of highlands divides the waters flowing into lake Michigan from those which fall into lakes Huron, St. Clair and Erie. The country along the eastern shore of lake Michigan, and extending into the interior as far as the dividing ridge, consists of sand hills, sometimes crowned with a few stunted trees, and a scanty vegetation, but generally bare, and thrown by the wind into a thousand fantastic shapes. The whole of this tract has been gained from the lake, and the land is still continually encroaching upon the water; every storm throwing up new quantities of alluvion. The eastern part of the territory, consisting of lands ceded by the Indians, has never till recently been brought into notice. It is now ascertained to be a fertile region, well fitted for wheat and fruit of all kinds, generally level and watered by fine rivers, most of which present facilities for the transportation of produce from the interior. Since the lands were offered for sale by the U. States' government, in 1818, emigrants have flocked hither in great numbers, and perhaps in no country, north of the cotton and sugar climate, could the farmer find a better field for enterprise or a surer pros-

pect of reward. The lands on Saganaw river and bay, which were ceded by the Indians in 1819, are represented to be of an excellent quality and beautifully situated.

Climate.] The climate is healthful, and much milder than in the Atlantic states in the same latitude. In the eastern part it resembles that of the western counties of New-York and Pennsylvania; towards the southern boundary it is much milder, but upon the coast of lake Huron, and even that of St. Clair, it is more severe.

Animals.] No state in the Union is so bountifully supplied with fish, aquatic fowls, and wild game. The trout of Michillimackinac have a superior relish: they weigh from 10 to 70 pounds, and are taken at all seasons. White fish are caught in prodigious numbers in the straits of St. Mary, the river Detroit and lake St. Clair. Sturgeon are common to lakes Erie, St. Clair, Huron and Michigan. The beaver frequents the rivers running into lake Michigan; bears, wolves, elk, deer and foxes are also found in the forests.

Chief Towns and Forts.] The city of *Detroit*, the capital of the territory, is regularly laid out on the west bank of Detroit river, 9 miles from lake St. Clair. It contains about 250 houses, and in 1820, had a population of 1,422, exclusive of the garrison. It is finely situated for commerce, and was settled as early as 1683, by the French from Canada, for the purposes of the fur trade. At present, its commerce is chiefly with Ohio and New-York, and with the military posts on the Upper lakes.

Michillimackinac, commonly called *Mackinaw*, is on an island in the straits of the same name. The island is about 9 miles in circumference, and the village is on the S. E. side, on a small cove, which is surrounded with a steep cliff 150 feet high. On the top of the cliff stands the fort. Behind the fort, at the distance of half a mile, is another summit, 150 feet higher, and 300 feet above the level of the lake, on which fort Holmes is erected; and from this spot there is an extensive prospect into lake Huron and lake Michigan. The figure of the island suggested to the Indians the appropriate name of *Michi-Mackinaw* or *Great Turtle*. It exhibits a beautiful appearance as seen from the lake. During the summer Mackinaw is the resort of many fur traders, and several thousand Indians from the north-west and south-west, visit the island on their way to Drummond's island, at the mouth of St. Mary's river, where the British have an establishment, and annually distribute presents to the Indians to the amount of £4,000.

St. Mary's village is at the foot of the rapids in St. Mary's river. It contains 15 or 20 buildings, occupied by five or six French and English families, and there was formerly a French fort within half a mile of the rapids. As a military and trading post this position is of the first importance, being at the head of ship navigation on the great lakes, and the grand thoroughfare of communication with the Indians of the upper counties as far as the Arctic circle; all the fur trade of the north-west being compelled

to pass through it. The government of the United States have resolved to occupy this post, and in June, 1820, obtained from the Chippeway Indians the cession of a tract of land 4 miles square, commencing at the rapids and extending 2 miles up and the same distance down the river, with a depth of 4 miles, including the portage and the site of the village and old fort, but reserving to the Indians the right of fishing at the falls. The lands on the banks of the river St. Mary are very fertile.

Green bay settlement is on Fox river, a mile and a half above its entrance into Green bay, and 184 miles S. W. of Mackinaw. The settlement extends along both sides of the river about 4 miles. It is of ancient standing, having been first begun by the French in the year 1670. The present inhabitants, about 500 in number, are almost without exception of mixed blood, the French having intermarried with the Indians. The country around the settlement has a healthful climate with a fertile and well watered soil.

Fort Howard is a military post in Green bay settlement. The present fort is on a low sandy spot, on the north side of Fox river, half a mile from its mouth; but a new stone fort was commenced in 1820, on a beautiful rising ground, 3 miles above the old fort. The number of the garrison is 600.

Fort Gratiot is a military post on St. Clair river, and commands the entrance into lake Huron. It stands a little below the point where the river leaves the lake. Opposite the fort, and for a mile below, there is a rapid in which the water runs with a velocity of 6 or 7 miles in an hour.

History.] This territory was first settled about the year 1670, by the French, who built forts at Detroit and Michillimackinac for the protection of the fur trade. In 1759 the country fell with Canada into the hands of the British. Since 1783 it has belonged to the United States. During the late war Michillimackinac and Detroit fell into the hands of the British, but were restored on the return of peace.

Population.] The population, exclusive of Indians, in 1810, was 4,762, and in 1820, 8,896, none of whom were slaves. The white settlements at present are chiefly in the S. E. on lake Erie, the river Detroit, lake St. Clair, and the rivers which fall into them, particularly the Maumee, Raisin and Huron.

Indians.] The number of Indians in this territory is estimated at between 9 and 10 thousand. The two principal tribes are the Chippewas and Ottawas. The *Chippewas* are about 6,000 in number, and live principally on Saginaw bay, Saginaw river and the vicinity: they have settlements also along the river St. Mary's, particularly at the falls. The *Ottawas* are between 2 and 3 thousand in number: their principal villages are on Grand river, and at L'Arbre Croche, 36 miles S. W. of Mackinaw.

Commerce.] The territory is finely situated for commerce, being almost surrounded by navigable waters, which will soon be connected by canals with the Hudson on the one hand, and the Mississippi on the other. The vessels which navigate the lakes

are generally from 10 to 60 tons burden. The amount of shipping in 1819 was 600 tons. The merchants supply themselves with European goods mostly from the city of New-York. The goods are transported by land to Buffalo, and thence by water to Detroit; but the revenue is defrauded to a considerable amount by smuggling carried on from the neighboring province of Upper Canada.

Islands.] There are numerous islands belonging to this territory, in lakes Huron, Michigan, and Superior. *Grand isle* is near the southern coast of lake Superior, between 86° and 87° W. lon. more than 100 miles from the eastern extremity of the lake. The island is celebrated for its fine harbor, which is said to be the most capacious, deep and completely land-locked of any in America. The *St. Martin's islands* lie about 10 miles north-east of Michillimackinac, and are noted chiefly for gypsum of a fine quality, which has been recently discovered upon them. The specimens, it is said, bear a greater resemblance to the Nova Scotia gypsum, than any of the numerous beds hitherto discovered in New-York, and other states of the Union. The quantity as far as can be judged from appearances, is inexhaustible.

Pictured Rocks.] The Pictured rocks are a series of lofty bluffs, which extend along the southern shore of lake Superior, immediately east of Grand isle. They consist of a surprising group of overhanging precipices, towering walks, caverns, water falls, and ruins, which are here mingled together, and burst upon the view in ever-varying succession. The rock of which this part of the shore is composed rises to the height of 300 feet in a perpendicular wall from the water. It is made up of coarse grains of sand, united by a calcareous cement, and occasionally imbedding pebbles of quartz. Externally, it presents a great variety of color, as black, red, yellow, brown, and white; which is owing partly to mineral waters that have oozed out of the crevices of the rock, but mainly, to the washing down of colored clay from the superincumbent soil. This stupendous wall of rock, exposed to the fury of the waves, which are driven up by every north wind across the whole width of lake Superior, has been partially prostrated at several points, and worn out into numerous bays, caverns and irregular indentations, which, at a distance, prevent the appearance of dilapidated battlements and desolate towers.

Among many striking objects in this assemblage of grand and picturesque scenery, two are worthy of particular admiration, the *Cascade La Portaille*, and the *Doric Arch*. The *Cascade* is a handsome stream, which is precipitated about 70 feet from the bluff into the lake, at one leap. Its form is that of a rainbow, rising from the lake to the top of the precipice: and it strikes the water at such a distance from the shore that boats can easily pass between. The *Doric rock* is an isolated mass of sand stone, consisting of four natural pillars, supporting an entablature of the same material, and presenting the appearance of a work of art. On the top of this entablature rests a stratum of alluvial soil, cov-

ered with a handsome growth of pine and spruce trees, some of which appear to be 50 or 60 feet in height. To add to the artificial appearance of the scene, that part of the entablature included between the pillars is excavated in the form of a common arch, giving it very much the appearance of a vaulted passage into the court-yard of some massy pile of antiquated buildings.

NORTHWEST TERRITORY.

Situation and Extent.] This territory is bounded N. by the boundary line between the United States and the British possessions; E. by Michigan territory; S. by the state of Illinois, and W. by the Mississippi. It extends from 42° 30' to 49° N. lat. and contains about 140,000 square miles. The Northwest Territory has no existence in law, but is incorporated with the government of Michigan, and constitutes the county of Crawford, which has been already mentioned under the divisions of that territory.

Lakes and Bays.] *Lake Superior*, the largest lake in North America, and supposed to be the largest body of fresh water on the globe, lies on the boundary line between the United States and the British possessions. Its greatest length from east to west is 490 miles, and its circumference 1700. The country on the north and east of the lake is said to be mountainous and barren, and the coasts are an embankment of rock from 300 to 1,500 feet high. The southern coast is very elevated, in some places sandy, but generally rocky and sterile. The lake is dangerous of navigation, being subject to fogs, mists and storms, which often prove disastrous to canoes. The principal bays are *Fond du Lac*, at the western extremity of the lake; *Chegoinegon* bay, which is separated by a peninsula from the *Fond du Lac*, and affords a fine harbor; and *Keweenaw* bay, an extensive body of water, on the east side of a promontory, which extends 45 miles into the lake from the middle of the southern shore.

Sandy lake is a small lake, about 12 miles in circumference, in the western part of the territory, near lat. 47° 10' N. and lon. 94° W. It communicates with the Mississippi through *Sandy lake river*, which is 2 miles long, 30 yards wide at its mouth, and boatable. On the south shore of the lake, near its outlet, is a fort occupied by the American S. W. Fur company. *Spirit lake*, 12 miles long and 4 wide, lies two days journey south of *Sandy lake*. The Mississippi, near its source, passes through *Cassina* or *Upper Red Cedar lake*, *lake Winnipeg*, and several smaller bodies of water, which may be regarded as mere expansions of the river.

Rivers.] The *Mississippi* forms the western boundary. Its principal tributaries from this territory are, 1. *Sandy lake river*, which forms the outlet of *Sandy lake*. 2. The *Mississaugaiegon*,

which forms the outlet of Spirit lake, and runs into the Mississippi, a short distance above the falls of St. Anthony. 3. *St. Croix* river, which joins the Mississippi a little below the falls of St. Anthony, after a southerly course of several hundred miles. 4. The *Chippeway*, which enters it in $43^{\circ} 45'$ N. lat. 5. The *Ouisconsin* is a large river which rises near the centre of the territory, and running at first in a southerly and afterwards in a westerly direction, joins the Mississippi at Prairie du Chien, near the S. W. extremity of the territory. It is a rapid river, but is navigable for boats 150 miles.

Fox river is a large stream, which falls into the S. W. end of Green bay, after running in a westerly direction for several hundred miles. In one part of its course it approaches within two miles of Ouisconsin river, and the portage between them is over a level prairie. Both streams are navigable to the portage for boats. The *Mistomine* runs into Green bay, 80 miles north of the mouth of Fox river.

The principal rivers which run into lake Superior from this territory, are, 1. *St. Louis* river, which discharges itself into Fond du Lac bay at the extreme western point of the lake. 2. The *Bois Brule*, which rises near the sources of the St. Croix, and running in a northerly direction falls into Fond du Lac bay. It is navigable 80 miles. 3. *Mauvais* river, which discharges itself a few miles east of Chegoimegon bay. It is navigable for canoes 100 miles. 4. *Montreal* river, which enters the lake 12 miles east of the Mauvais, interlocks with the Chippeway and Ouisconsin, but the connexion is interrupted by long portages. 5. The *Ontonagon*, which discharges itself near lon. 89° W. after a northerly course of 120 miles. It is navigable only 36 miles on account of the rapids.

Inland Communication.] One of the best and most frequented routes of communication between the great lakes and the Mississippi, is through the Fox and Ouisconsin rivers. The Ouisconsin is ascended in canoes 90 miles above the portage, and is also connected by short portages with the Ontonagon and Montreal rivers of lake Superior. A communication is also maintained between lake Superior and the Mississippi by means of St. Louis river, which at one place approaches very near Savannah river, a small stream that discharges itself into Sandy lake.

Face of the Country, Soil and Productions.] This territory has been very imperfectly explored; but the alluvial bottoms on its rivers, wherever they have been examined, are said to be as rich as those of Ohio and Michigan. The lands on Fox river particularly, are spoken of as remarkably good. The most remarkable vegetable production is the wild rice, a productive and highly valuable aquatic plant, with which the lakes, rivers and bays generally abound. It grows in water of from 4 to 7 feet deep. When it is ripe the Indians pass through it in their canoes, lined with blankets, and bending the stalks over the sides, beat off the grain with sticks; and such is the abundance of the harvest, that an expert man will soon fill a canoe.

Settlements.] *Prairie du Chien* is a settlement on the Mississippi, 3 miles above the mouth of the Ouiskonsin. It was originally formed by the French, who intermarried with the Indians, and the present inhabitants, amounting to between 300 and 400, are almost entirely of mixed blood. Above the settlement stands fort Crawford, which is strong and well garrisoned. The American S. W. Fur company have an establishment on the south shore of Sandy lake; another on St. Croix river, 100 leagues from its mouth: and another on St. Louis river, 21 miles from its entrance into lake Superior.

Indians.] The principal tribes of Indians in this territory are the Chippeways, the Winnebagoes, and the Menomonees. The *Chippeways* are not confined to this territory, but consist of numerous petty bands, scattered over the immense region from Detroit to the sources of the Mississippi. Their whole number is estimated at more than 11,000, about one half of whom are in this territory. They are almost constantly at war with the Sioux, who live west of the Mississippi. The *Winnebagoes* live in the southern part of the territory, on Fox river and the Ouiskonsin. Their number is nearly 6,000. The *Menomonees* are nearly 4,000 in number, and live principally on the west side of Green bay, along Menomonee river, and on Fox river in the lower part of its course. The whole number of Indians in the N. W. territory is estimated at 18,000.

Copper Mines.] The southern coast of lake Superior yields iron, lead and various other metals, but particularly copper. On the banks of the river Ontonagon large masses of this metal are found in a pure state, and from the appearances of the surrounding country there is little doubt that extensive copper mines exist in the vicinity. The largest mass examined by Mr. Schoolcraft weighed, according to his estimate, 2,200 lbs. and is said to be the largest piece of pure native copper in the world.

MISSOURI TERRITORY.

Situation and Extent.] Missouri territory is bounded N. by the British dominions; E. by the N. W. territory and the states of Illinois and Missouri; S. by Arkansas territory; S. W. by the Spanish dominions; and W. by the Rocky mountains. The area is estimated at 800,000 square miles.

Rivers.] The *Mississippi* forms the eastern boundary. Its principal tributaries from this territory, are *St. Peter's river* and the river *Des Moines*.—The *Missouri* pursues a circuitous course through the heart of the territory. Its principal tributaries are, the *Yellowstone*, the *Platte* and the *Kansas*. All these rivers have been described. See pages 70, 71 and 72.

Face of the Country and Soil.] Taking the whole country together, it may be pronounced an extensive region of open plains and meadows, interspersed with barren hills. It is almost destitute of woods, except in the neighborhood of streams, and in most parts can scarcely be said to admit of settlements. The tracts lying immediately on the great rivers constitute the most valuable parts. The banks of the Mississippi afford suitable situations for settlements as high up as the falls of St. Anthony, and the country watered by the Yellowstone and its branches is said to be as fertile and extensive as the valley of the Ohio, and capable of supporting as numerous a population.

Animals.] Buffaloes and other wild animals wander in immense herds over almost every part of the territory; but particularly on the banks of the Arkansas and Missouri, which are regarded as the paradise of hunters.

Indians.] This territory is inhabited, except at a few military posts, exclusively by Indians. The tribes best known to us are the Sioux, Osages and Fox Indians. The *Sioux* are the most powerful tribe in North America. They inhabit, with trifling exceptions, all the country between the Mississippi and Missouri rivers, south of the parallel of 46° N. lat. Their country also includes large tracts south of the Missouri and east of the Mississippi. They are brave, spirited and generous, with proud notions of their origin, and of their superiority as hunters and warriors. Their number has been estimated at 22,000. They are almost constantly at war with the Chippeways. The *Osages* live principally in this territory, but partly in Arkansas. Those in this territory are called *Osages of the Missouri*, and are divided into Great and Little Osages. They live in two separate villages, which are 6 miles apart, on Osage river, about 360 miles above its junction with the Missouri, in lat. 37° N. and lon. $96^{\circ} 40'$ W. Their whole number is estimated at 6,000, of whom about 4,000 are Great Osages, and 2,000 Little Osages. The distinction between them is merely nominal, as they form parts of one nation. The *Fox Indians* are a small but warlike tribe, on both sides of the Mississippi, between the Wisconsin and Rock rivers. Within their territory are Dubuque's lead mines which are considered as the richest yet found in the United States. They are on the west side of the river, 75 miles below Prairie du Chien, and are at present wrought exclusively by the Indians.

Military posts.] In 1805 the government of the United States purchased of the Indians a tract of land around the falls of St. Anthony, 9 miles square; and in 1819, 300 soldiers were sent to occupy it as a military position. A fort has been erected on a high bluff within this tract at the junction of the river St. Peter's with the Mississippi, a spot which commands the navigation of both rivers, and appears capable of being rendered impregnable with little expense. As a military position it is of great importance, being in the neighborhood of many powerful Indian tribes, who have heretofore been under the exclusive influence of the British Fur companies. The garrison will have a ready access into the

heart of the countries occupied by these tribes, by three distinct channels of communication; by the Mississippi, which is navigable towards the north 600 miles above the falls; by the St. Croix, on the N. E. which joins the Mississippi just below the falls, and communicates with lake Superior by a portage of half a mile; and by the St. Peter's on the N. W. which runs through the territory of the Sioux, the most powerful of the Indian tribes, and is navigable for several hundred miles.

The *Mandan village*, on the Missouri, in lat. $47^{\circ} 20'$ N. and lon. $100^{\circ} 50'$ W. has been selected by the government of the United States for a military post. It is only 150 miles south of the establishment of the Hudson bay company on Assiniboin river, and is well situated to prevent that company from extending their trade towards the head waters of the Missouri, and along the Rocky mountains; a tract of country which is said to produce fur of a better quality and in greater abundance than any other portion of North America.

Council Bluff, on the east side of the Missouri, a little above the mouth of the Platte, is occupied as a military post. It is in the centre of the most numerous Indian population west of the Mississippi, and is at that point on the Missouri, which approaches nearest to the post at the mouth of the St. Peter's, with which, in the event of hostilities, it may co-operate.

ARKANSAS TERRITORY.

Situation.] Arkansas territory is bounded N. by Missouri territory and state; E. by the Mississippi; S. by Louisiana, and by Red river which separates it from the Spanish dominions; and W. by the Spanish dominions.

Divisions.] The territory is divided into 7 counties.

<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>	<i>Counties.</i>	<i>Pop.</i> <i>in 1820.</i>	<i>Slaves</i> <i>in 1820.</i>
Arkansas,	1,260	178	Phillips,	1,201	145
Clark,	1,040	70	Pulaski,	1,923	171
Hempstead,	2,243	431			
Lawrence,	5,602	490	Total,	14,273	1,617
Miller,	999	82			

Rivers.] *Arkansas river* enters the territory near its N. W. corner, and running in a direction east of south discharges itself into the Mississippi 400 miles above the mouth of Red river.

White river rises in the western part of the territory near 97° W. lon. and 36° N. lat. and after a circuitous course of more than 1,200 miles, falls into the Mississippi 20 miles above the mouth of the Arkansas. The lands on this river and its branches have never been explored till recently. They are now universally represented as extremely fertile and among the finest in America for settlement. The *St. Francis* terminates its course in this territory. The *Ouachita* rises here, and runs south into Louisiana.

Chief Settlements.] The village of *Little Rock*, on Arkansas river, about 140 miles from its mouth, is the seat of government. The settlement was commenced in 1820. The post of *Arkansas* was established by the French more than a century ago on Arkansas river, 65 miles from its mouth. Most of the inhabitants are of mixed blood, descendants of French and Indians.

Indians.] The principal tribes are the Osages and Cherokees. The *Osages* of the Arkansas are 2,000 in number, and inhabit several villages on branches of Arkansas river, about 150 miles S. W. of the villages of the Great and Little Osages in Missouri territory. One of their principal villages is on Grand river, 25 miles from its junction with the Arkansas, in lat. 35° 30' N. and lon. 97° 20' W. This spot has been fixed upon by the United Foreign Missionary society as a missionary station. It is named *Union*, and in the summer of 1820, a mission family, consisting of more than 20 persons, was sent to occupy it.—In the years 1818 and 1819, about 5,000 of the Cherokee Indians removed from their residence on the east of the Mississippi to a fine tract of country on the north bank of Arkansas river, between 94° and 95° W. lon. At their desire, the American Board of Commissioners for Foreign Missions have recently established a missionary station among them, called *Dwight*.

Population.] The population, in 1810, was 1,062.; and in 1820, 14,273, exclusive of Indians and hunters. The hunter population is composed of persons from various sections of the Union, who have either embraced hunting from an excessive fondness for the pursuit, or have fled from society to escape the severity of the laws, and to indulge in unrestrained passion. They subsist almost entirely by hunting, and differ very little in any respect from the savages. They live chiefly on White river, the Arkansas, and Red river. Their number is estimated at 1,000 or 1,500.

Hot Springs.] The celebrated Hot Springs of Ouachita or Wachita are in Clark county, on Hot Spring creek, which falls into the Wachita 8 miles below. The accommodations are miserable, the country being almost a wilderness, yet there are frequently 200 or 300 persons collected here, some from a distance of 1,000 miles. The temperature is nearly that of boiling water

FLORIDA.

Situation and Extent.] Florida is a long narrow peninsula, jutting out from the southern extremity of the United States, and bounded N. by Alabama and Georgia; E. by the Atlantic; S. and W. by the gulf of Mexico. Formerly the name was applied to the whole country east of the Mississippi, and bounded as follows: N. by the river St. Mary from the sea to its source; thence, west, to the junction of Flint river with the Appalachicola;

then up the *Appalachicola* to the parallel of 31° N. lat.; thence, due west along that parallel, to the Mississippi. The river *Appalachicola* divided this country into East and West Florida. The part lying between the Mississippi and Pearl river is now included in the state of Louisiana, the part between Pearl river and the Perdido belongs to the states of Mississippi and Alabama; and the part east of the Perdido, is the country that is now properly called Florida. It lies between 25° and 31° N. lat. and between $80^{\circ} 30'$ and $87^{\circ} 20'$ W. lon. The area has been estimated at 50,000 square miles.

Rivers.] The *Perdido* forms the western boundary. The *Escambia* rises in Alabama, and falls into Pensacola bay, a little east of the *Perdido*. The *Appalachicola* is formed by the union of Flint and Chattahoochee rivers at the S. W. extremity of Georgia, and running in a southerly direction discharges itself into St. George's sound, the western part of Apalachy bay.

The *St. John's* is the principal river of Florida. It rises in the southern part of the peninsula, between 26° and 27° N. lat. and running in a northerly direction, expands into several lakes; one of which, called lake George, is 20 miles long and 15 wide. Within 20 miles of its mouth, the river turns to the east and falls into the Atlantic, near lat. 30° N. Its whole length is about 300 miles, and it is navigable for vessels which can pass the bar at its mouth to lake George, 150 miles. The bar has 2 feet of water at low tide, and there is good anchorage outside of the bar for large vessels.

Bay.] *Pensacola bay*, at the mouths of *Escambia* and *Almirante* rivers, is 15 miles long, and from 3 to 7 broad. It is completely landlocked, so that vessels are perfectly safe from every wind. The water is said to be sufficiently deep for vessels of the largest class, and the entrance is capable of being effectually defended. This bay is a great acquisition to the United States, as it is the only commodious and safe harbor for large ships in the gulf of Mexico.

Soil and Productions.] The soil is very various. In some parts, especially on the banks of the rivers, it is equal to any in the world; in other parts, indifferent; and there are large tracts which are represented to be of little value. The country, however, has been but imperfectly explored, and few agricultural experiments have been made. Much of the land, which on a superficial view has been supposed to be not worth cultivating, it is believed may be turned to very profitable account. The productions are corn, rice, potatoes, cotton, hemp, oranges, and other tropical fruits, and it is supposed that coffee and the sugar cane will flourish here. The forests yield fine live oak and pitch pine.

Chief Towns.] *St. Augustine* is pleasantly situated and regularly laid out on the eastern coast, a few miles south of the mouth of *St. John's* river. The harbor has a bar at the mouth, over which at the lowest tides there is only 5 feet of water; but there is a roadstead outside of the bar which affords anchorage for

larger vessels. The town and the entrance to the harbor are well defended by a strong fort. The atmosphere is remarkably dry and healthful, and invalids frequently resort hither for the benefit of the climate. The population is estimated at 5,000.

Pensacola is on the west side of Pensacola bay, 50 miles E. S. E. of Mobile. It stands in a healthful situation, on a dry sandy plain, elevated 18 or 20 feet above the level of the water. The population, in 1819, was about 2,000. Since the cession of Florida to the United States, emigrants from various parts of the Union have resorted to this place in great numbers.

History and Population.] Florida has frequently changed masters. Until 1763 it belonged to Spain. It was then ceded to Great Britain; but in 1783, was restored to Spain, with whom it remained till 1821, when it was ceded to the United States. The white population is composed of Spaniards, English, Scotch, Irish and Americans. Their number is supposed not to exceed 10 or 15,000. Extensive tracts of the country have never yet been explored by white men. The Seminole Indians formerly possessed the most fertile districts, but in their recent contest with the United States they were nearly exterminated.

TERRITORY OF OREGON.

This name has been applied to the part of the United States west of the Rocky mountains, and derives its name from the river *Oregon* or *Columbia*. Our knowledge of the territory is principally confined to this river. It rises in the Rocky mountains near lat. 55° N. and running in a S. W. direction, falls into the Pacific ocean, in lat. $46^{\circ} 15'$ N. The whole length of the river is estimated at 1500 miles. Its principal tributaries are the *Wallaumut* or *Multnomah*, *Lewis river*, and *Clarke's river*, all of which join it on the S. E. side; the first, 125 miles from its mouth, the second 413, and the third about 600. Vessels of 300 tons may ascend the Columbia as far as the mouth of the Wallaumut. The tide flows up 183 miles, and large sloops may ascend this distance. Seven miles further up the navigation is interrupted by the great rapids. Above the rapids, the river is navigable for 65 miles, till it is interrupted by the long narrows, and 6 miles further up by the falls. Above the falls there are no obstructions for 150 miles, to the mouth of Lewis river. The portages around the great rapids, long narrows, and falls, are in all five miles. As you ascend the river the country for the first 160 miles is covered with heavy timber, mostly of the pine species; thence the woods diminish gradually for 60 miles, till nothing is found but stunted trees and shrub oaks. The banks of the Columbia are inhabited by various Indian tribes, who subsist chiefly on the salmon, which the river yields in immense quantities. The American Fur company have a settlement, called *Astoria*, on the S. side of the river, 14 miles from the ocean.

MEXICO OR NEW SPAIN.

Situation.] This country is bounded N. and N. E. by the United States; E. by the Gulf of Mexico; S. E. by Guatemala; and W. by the Pacific Ocean. It extends from 16° to 42° N. lat. and from 83° to 124° W. lon.

Divisions.] Much of the northern part of the country is inhabited by savage Indians. The remainder is divided into 15 intendencies and provinces, as follows:

<i>Divisions.</i>	<i>Sq. Miles.</i>	<i>Pop. in 1803.</i>	<i>Chief Towns.</i>
1. Old California	55,850	9,000	Loreto
2. New California	16,278	15,600	Monterey
3. New Mexico	43,731	40,200	Santa Fe
4. Sonora	146,635	121,400	Arispe
5. Durango or New Biscay	139,247	159,700	Durango
6. San Luis Potosi	263,109	334,900	St. Luis Potosi
7. Guadalupe	73,623	630,500	Guadalupe
8. Zacatecas	13,089	153,300	Zacatecas
9. Guanajuato	6,878	517,300	Guanajuato
10. Valladolid	26,396	376,400	Valladolid
11. Mexico	45,401	1,511,800	Mexico
12. Puebla	20,651	813,300	Puebla
13. Vera Cruz	31,720	156,000	Vera Cruz
14. Oaxaca	34,064	534,800	Oaxaca
15. Yucatan, or Merida	45,784	465,800	Merida
Total	957,541	5,840,000	

Sea Coast.] The eastern coast of New Spain, properly speaking, possesses no port; for Vera Cruz, through which the whole commerce is carried on, is merely a bad anchorage. The cause of this disadvantage is the Gulf Stream, which, in its passage along the shore, continually throws up the sands of the ocean, forming bars over which large vessels cannot pass. The sands thus heaped up by the stream are continually adding to the continent, and the ocean is every where retiring. These obstacles do not exist on the coast of the Pacific Ocean. San Francisco in New California, San Blas in the intendancy of Guadalupe, near the mouth of the river Santiago, and especially Acapulco are magnificent ports. A very serious inconvenience, however, is common to the eastern coast and the coast of the Pacific Ocean. They are rendered inaccessible for several months of every year by violent tempests, which effectually prevent all navigation.

Face of the Country.] The land on both the coasts is low, but rises gradually as you approach the interior, till it has attained the height of 6 or 8,000 feet above the level of the ocean; it then spreads out into broad plains or *table lands*, presenting the strange spectacle of an immense level country on the top of

a lofty range of mountains. These plains extend along the range from lat. 18° to lat. 40° N. a distance of 1700 miles.

Mountains.] A chain of colossal mountains, called the Cordillera of Mexico, passes through the whole length of this country from southeast to northwest. It may be considered as a prolongation of the Andes of Peru, or a part of the great chain which runs through the American continent from Cape Horn to the Frozen Ocean. Its top, as we have already mentioned, consists of extensive plains or table land. From these elevated plains single mountains occasionally shoot up, whose summits are covered with everlasting snow. Several peaks near the city of Mexico are more than 15,000 feet high, and the loftiest are volcanoes.—The crest or highest part of the chain sometimes approaches the Pacific Ocean, at other times it occupies the centre of the country, and sometimes it bends towards the Gulf of Mexico. In the province of Oaxaca, for example, it occupies the centre of the Mexican isthmus; from $18\frac{1}{2}^{\circ}$ to 21° N. lat. in the intendancies of Puebla and Mexico, it stretches from south to north, and approaches the eastern coast, after which it turns to the northwest towards the city of Guanajuato. To the north of that city it divides into three branches, of which the most eastern runs into the intendency of San Luis Potosi, towards the mouth of the Rio Bravo del Norte. The western branch traverses the intendancies of Guadalajara and Sonora to the banks of the Rio Gila. The third branch, which may be considered as the central chain of the Mexican Andes, occupies the whole extent of the intendency of Zacatecas, and passing through Durango and New Mexico under various names, joins the Rocky Mountains of the United States.

The highest summits in the Cordillera of Mexico are Popocatepetl, a volcano, 17,720 feet above the level of the ocean; Citlaltepetl or the Pic d' Orizaba, a volcano, 17,371 feet; Iztaccihuatl, 15,700 feet; and Toluca, 15,159 feet. All these are near the parallel of 19° N. lat.

Climate.] Almost one third of the territory included in the provinces of New Spain is situated in the torrid zone; and for this reason it might be supposed that the heat would be excessive; but the climate of a country does not depend altogether on its distance from the pole, but also on its elevation above the level of the sea. Hence, of the 50,000 square leagues lying under the torrid zone, more than three fifths enjoy rather a cold or temperate than a burning climate. In the low plains on both coasts, the heat is very oppressive and the climate unhealthy to Europeans; but when you advance into the interior, and begin to ascend the declivity of the Cordillera, it becomes more temperate, and at the elevation of 4 or 5,000 feet there reigns perpetually a soft spring temperature, which never varies more than 8 or 9 degrees, and is very healthy, the extremes of heat and cold being equally unknown. As you advance still higher the climate becomes cooler, and at length on the tops of some of the loftiest mountains you come to the region of perpetual snow.

Thus in the course of two or three days, the traveller may enjoy all the variety of summer, spring and winter.

Soil and Productions.] A considerable part of the country situated to the north of the tropic is rendered barren by the want of moisture; and in many parts also of the table land within the tropics, the plains are arid and destitute of wood. Still a great portion of New Spain belongs to the most fertile regions of the earth. On the banks of all the rivers, and wherever there is a supply of moisture, the fertility is extreme. The declivity of the Cordillera is exposed to humid winds and frequent fogs, and the vegetation, nourished by these aqueous vapors, exhibits an uncommon beauty and strength. The humidity of the coasts also, assisted by a burning sun, though it generates some terrible diseases, is favorable to the growth of the richest produce of tropical climates.

The productions of this country are as various as its climate. In the course of a few hundred miles, you may meet with almost all the fruits of the temperate and torrid zones. The fertile regions on the coast produce in abundance sugar, indigo and cotton. The *banana* also, which supplies the place of bread to the inhabitants of the torrid zone, and which is said to produce a greater quantity of nutritive substance than any other plant on the same space of ground, flourishes luxuriantly in all the low country. A piece of land which, if planted with wheat, would yield barely sufficient for the subsistence of two individuals, would be capable of maintaining at least fifty if planted with bananas. Accordingly, a European newly arrived in Mexico, is struck with nothing so much, as the extreme smallness of the spots under cultivation round a cabin which contains a numerous family of Indians. The same region in which the banana flourishes produces also the *manioc*, which yields a very nutritious bread, and is extensively cultivated along the coasts. But by far the most important agricultural production is *maize*, and the year in which the maize harvest fails is a year of famine and misery for the inhabitants of Mexico. It grows in the low country, and on all the table land except some of the highest plains, and the produce is most abundant, being in some places eight hundred fold, and on an average one hundred and fifty fold. In the most warm and humid regions it will yield two or three harvests annually. Wheat, rye, and other European grains have been successfully introduced in the northern provinces, and on the elevated plains within the tropics. All the garden vegetables and fruit trees of Europe are now also possessed by the Mexicans. The central table land produces in the greatest abundance cherries, prunes, peaches, apricots, figs, grapes, melons, apples and pears. The vine and the olive would also flourish in this delightful climate, but through the influence of the merchants in the mother country their cultivation has been prohibited, and the colonists are still obliged to import their oil and wine from Old Spain.

Rivers.] The *Arkansas* forms a part of the northeastern boundary. *Red river* rises in this country and flows southeast into the

United States. The *Sabine* is the eastern boundary. The *Rio Bravo del Norte* rises in the Rocky mountains, near the source of the *Arkansaw*, in about lat 40° N. and running in a southeasterly direction falls into the gulf of Mexico, after a course of nearly 2,000 miles. It cannot in any part be termed a navigable stream. The *Colorado de Texas*, the *Nueces*, and several smaller streams fall into the gulf of Mexico between the *Sabine* and the *Rio Bravo*. The *Colorado of California* rises on the west side of the great mountain range, near the sources of the *Rio Bravo*, and running in a southwesterly direction falls into the head of the gulf of California, after a course of about 900 miles, of which it is navigable for the last 300. The *Gila* is an eastern branch of the *Colorado*, and joins it near its mouth, after a course of about 600 miles. All these rivers flow through thinly settled and uncivilized regions.

In the equinoxial part of Mexico there are no large rivers. The narrow form of the continent prevents the collection of a great mass of water. The rapid declivity of the *Cordillera* abounds more properly with torrents than rivers. Among these small streams, the only ones probably which will ever be interesting for interior commerce are, 1. The *Rio Guasacualco*, which falls into the Gulf of Mexico to the southeast of *Vera Cruz*. 2 *Rio de Moctezuma*, which rises from the small lakes near the city of Mexico, and flowing north falls into the *Tampico*. 3. The *Rio de Zacatula*, which also rises near the city of Mexico and runs west to the Pacific Ocean. 4. The *Santiago*, which rises about 20 miles west of the city of Mexico, and running in a northwesterly direction, passes through the great lake *Chapala*, and enters the Pacific Ocean by a broad mouth, after a course of more than 600 miles.

Lakes. Lake *Chapala* is by far the largest lake. It lies just above the latitude of 20° about 120 miles west of the city of Mexico, and is 90 miles long and 20 broad, covering an area of 1225 square miles.

There are four small lakes in the spacious valley in which the city of Mexico is situated. The waters in these lakes used formerly to rise above their banks and inundate the city and the valley. In 1629 there was a great inundation, which lasted for five years; and during the whole of that time, the streets of Mexico could be passed only in boats. To prevent the recurrence of this evil various means were employed without effect. At first, a huge dike or mound of stones and clay was erected, 70 miles long and 65 feet broad; but the waters burst through it and tore it away. A subterranean passage was then dug through the mountains which surround the valley, to let off the waters; but the earth caved in and filled up the passage. At length a drain, 12 miles long and in some places 200 feet deep, has been cut through a gap in the mountains, and this proves to be an effectual remedy.

Chief Towns.] Mexico, the capital of New Spain, and the most populous city in America, is situated below the parallel of 20° N. lat. midway between the gulf of Mexico and the Pacific

ocean, in a delightful valley, which is 230 miles in circumference, and elevated more than 7,000 feet above the level of the ocean. The ancient city was built by the Mexicans in 1325, on a groupe of islands in lake Tezcucó, and was connected with the main land by three principal dikes or causeways, from a mile and an half to six miles long. The modern Mexico was built by the Spaniards on the ruins of the ancient city; but though it occupies exactly the same situation, yet owing to the retreat of the waters, it is now on dry land, about a league distant from the banks of the lake. The city is regularly built in the form of a square, of four miles on each side. The streets are broad, clean, generally paved and well lighted, and intersect each other at right angles. The public buildings are magnificent, and some of them of the most beautiful architecture. The mint is the most extensive establishment of the kind in the world, and employs about 400 workmen. Services of plate of the value of £ 7,000 have lately been manufactured in Mexico, and the working of gold and silver in all its branches is carried to great perfection. This beautiful city is supplied with water by two aqueducts, and its vegetables are raised on the elegant floating gardens of the lake of Tezcucó. It contains upwards of 100 churches, and 137,000 inhabitants, of whom one half are whites, and the rest Indians, mulattoes and mestizoes. Owing to its extraordinary elevation above the level of the ocean, the city, notwithstanding its position in the torrid zone, enjoys a mild and temperate climate. The surrounding country is occupied by gardens and orchards in a high state of cultivation, and during the whole of the year, both fruits and flowers are produced in abundance.

Guanajuato, about 150 miles N. W. of Mexico, is a large and flourishing city, famous for its gold and silver mines. The population within the city amounts to 41,000, and in the neighbouring mines to 29,600; in all, 70,600. The ground on which the city is built is nearly 7,000 feet above the level of the sea.

Puebla, famous for its manufactures of earthen ware, iron and steel, is 70 miles E. S. E. of Mexico. It is one of the most populous cities in Spanish America, containing 67,800 inhabitants. The ground on which the town is built is more than 7,000 feet above the level of the sea.

Zacatecas, one of the most celebrated mining places of New Spain, is more than 300 miles N. N. W. of Mexico, and contains 33,000 inhabitants.

Vera Cruz, on the Gulf of Mexico, 180 miles E. S. E. of Mexico, is one of the most considerable places for trade in Spanish America, being the port through which the commerce of New Spain is carried on with Europe and the West Indies. The city is regularly and beautifully built, and inhabited by well informed merchants, but is unhealthy, owing in part to the bad quality of the water. The port is hardly worthy of the name, being rather a dangerous anchorage among shallows. It is defended by the fortress of St. Juan d' Ulua, erected at great expence on an island near the town. Population 16,000.

Acapulco, on the coast of the Pacific ocean, is the port through which the commerce of New Spain is carried on with Asia and the islands of the South Sea, particularly with the Philippine islands. Its port is one of the finest in the world, being an immense basin cut out of the granitic rocks, and capable of containing any number of vessels in perfect safety. The shore is so steep, that a vessel of the line may almost touch it without running the smallest danger, there being every where, close to the rocks, from 10 to 12 fathoms water. But notwithstanding its excellent port and extensive trade, *Acapulco* is a miserable town, with only 4000 inhabitants, mostly people of color, who are increased to 9,000 by the resort of strangers to the annual fair, held at the time of the arrival of the *Manilla galleon*. The position of the town is extremely unhealthy, being surrounded by a chain of mountains, which by reverberating the sun's rays and excluding the air, add greatly to the suffocating heat of the climate. To give admission to the sea breeze a passage has actually been cut through the mountains, but though this affords partial relief, the place is still far from being healthy.

Santa Fe, in New Mexico, is remarkable as the most northern town of any note in the country. It is in lat. $36^{\circ} 30'$, on the E. bank of the *Rio bravo del Norte*, and contains 4,500 inhabitants.

Population.] In 1793 the population according to the official returns was 4,483,529. Humboldt supposes this number too small by about one sixth, and allowing for the increase in ten years, estimates the population in 1803 at 5,840,000 and in 1808 at 6,500,000. In 1822 it may be estimated at 8,500,000.

This population is composed of the following classes. 1. European Spaniards. 2. Creoles, or whites of European extraction born in America. 3. Negroes. 4. Indians. 5. Mestizos, or descendants of whites and Indians. 6. Mulattos, or descendants of whites and negroes. 7. Zambos, or descendants of negroes and Indians. The number of European Spaniards is only about 80,000, and that of the negroes only 6 or 8,000. The Creoles form about one fifth of the whole population, the Indians two fifths, and the mestizos, mulattoes and zambos nearly two fifths.

Indians.] The Indians and the races of mixed blood were formerly slaves and treated with great cruelty, but within the last century their condition has been much improved. They are no longer compelled to work in the mines, nor are they dragged from their homes to carry without sufficient nourishment or repose, through mountainous woods, burdens which exceed their strength; but they are still in a state of extreme humiliation. All the wealth of the kingdom is in the hands of the whites, and the Indians are virtually incapable of acquiring property. They are kept in a state of extreme ignorance, and are employed by the Spaniards to cultivate the soil. They live in villages by themselves, and are governed by magistrates of their own color.

Diseases.] The small pox was unknown till it was introduced by the Spaniards in 1520. Since that time several millions of Indians have perished by this disease, which usually ravages the

country once in seventeen or eighteen years; but the introduction of inoculation has rendered it much less destructive. The *matlazahuatl*, a disease peculiar to the Indian race, seldom appears more than once in a century. It raged in 1545, 1576 and 1736, and is called a plague by the Spanish authors. It bears some resemblance to the yellow fever, but it never attacks white people. The yellow fever on the other hand seldom attacks Indians. The principal seat of the yellow fever is the hot and moist country on the coast, but the *matlazahuatl* carries terror and destruction into the very interior of the country, to the central table land, and the coldest and most arid regions of the kingdom. It has been estimated, without sufficient data however, that in the epidemics of 1545, and 1576, 800,000 Indians died in the former, and 2,000,000 in the latter. Famine sometimes commits awful ravages in this country. It is estimated that in 1784, 300,000 persons perished by famine and the diseases to which it gave birth.

Religion.] The religion is the Roman Catholic. The Mexican church is placed under the care of an archbishop and 8 bishops, several of whom possess revenues of more than 100,000 dollars. The number of clergy is about 10,000.

Education.] Very little attention is paid to classical literature, but the mathematics, chemistry, natural history and the fine arts are very diligently studied. According to Humboldt no city in America, not even excepting those of the United States, can display such great and solid establishments for the promotion of science as the city of Mexico. Of these, the most remarkable are the school of mines, the botanic garden, and the academy of painting and sculpture.

Political condition. Mexico is a colony of Old Spain and is governed by a viceroy. All the principal places under the government have always been bestowed exclusively on European Spaniards, and for some years past the Creoles have not been appointed even to the most trifling employments in the administration of the customs and tobacco revenue. The result has been a jealousy and perpetual hatred between the Europeans and the Creoles. A mutual and bitter hatred has also always existed between the whites and the Indians; so that the seeds of discord seem to be deeply planted in this heterogeneous population.—In the insurrection which broke out in 1810, the mutual hatred of the Europeans and creoles was awfully exemplified in their cruel treatment of each other. The insurrection commenced in the province of Guanajuato, in the centre of the mining country, and spread with inconceivable velocity in every direction, and was finally suppressed only by the extraordinary activity and firmness of the viceroy.

Roads.] Owing to the extraordinary configuration of this country, there is no difficulty in travelling from north to south, the level of the table land being almost uninterrupted from Mexico to Santa Fe; but the declivities of the Cordillera present great obstacles to the commerce between Mexico and the cities on the

coast. The road from Mexico to Acapulco is furrowed by four very deep and remarkable longitudinal vallies, so that the traveller is continually ascending and descending, exchanging alternately a cold climate for one excessively hot. On the contrary in travelling from Mexico to Vera Cruz, a distance of 180 miles, there is on the whole no descent till you approach within 80 miles of the coast; it then becomes rapid and continued, being 6,800 feet in the space of 45 miles, and 1000 more in a further distance of 24 miles. It is the difficulty of this descent, which makes the transportation of flour from the table land to Vera Cruz so expensive, that it cannot be sent to Europe in competition with that of the United States. A superb causeway, however, was commenced several years since, along this eastern declivity of the Cordillera, by the merchants of Vera Cruz, and when it is completed will have the most happy influence on the prosperity of the whole kingdom of New Spain.

Mines.] More than nine tenths of all the silver in the known world is derived from the mines of Spanish America, which produce according to the estimate of Humboldt, 43,500,000 dollars annually; and of this sum New Spain yields about two thirds. Yet notwithstanding this immense produce, the theory of mining is very imperfectly understood, and all the operations are conducted in the most unskilful and extravagant manner. The richest mines are those of Guanaxuato, in the intendency of the same name; Catorce, in the intendency of San Luis Potosi, Zacatecas, in the intendency of the same name; Real del Monte, in the intendency of Mexico; and Bolanos, in the intendency of Guadalajara. The silver mines are a source of immense wealth to their proprietors. In one instance, a single seam yielded to its owner in six months a nett profit of more than 3,000,000 dollars. But money thus rapidly gained is as rapidly spent. The working of mines becomes a game which is pursued with unbounded passion. The rich proprietors lavish immense sums on quacks, who engage them in new undertakings, and the money sunk in a rash project, frequently absorbs in a few years all that was gained in working the richest seams. The quantity of gold annually delivered into the mint of Mexico is about 5,000 pounds. There are also mines of copper, lead, iron, tin, antimony, arsenic &c; but they are not diligently worked, the great pursuit being after gold and silver.

Commerce.] The commerce of New Spain with the mother country is carried on almost entirely through the port of Vera Cruz. In time of peace, Humboldt estimates the annual value of the exports from that place, at 21 millions of dollars, and the imports at 15 millions. The principal exports are gold and silver in coin, bullion and plate, to the value of 17 million dollars; cochineal, 2,400,000; sugar 1,300,000, &c. The imports are bale goods, including woollens, cottons, linens and silks, to the value of \$9,200,000; paper, 4,000,000; cacao, 1,000,000; quicksilver, \$50,000.

GUATIMALA.

Boundaries and Extent.] Guatimala is bounded on the N. by New Spain and the Bay of Honduras; E. by the Caribbean sea; S. E. by the isthmus of Panama or Darien, through which it is connected with South America; and S. W. by the Pacific Ocean. It extends on the coast of the Pacific from Punta Gorda in about lat. 9° to the Barra de Tomala in lat. $16^{\circ} 12'$ N. a distance of 770 miles; and on the Gulf of Mexico from 10° to 18° N. lat. It contains about 300,000 square miles.

Divisions.] This country is divided into the six following provinces:

Chiapa,	Honduras,
Vera Paz,	Nicaragua,
Guatimala,	Costa Rica.

Face of the Country.] A ridge of mountains is supposed to pass through the whole extent of this country from S. E. to N. W. connecting the Andes of South America with the Cordilleras of Mexico. The continuity of the range, however, has never been accurately ascertained. No spot on the globe is so full of volcanoes as this part of America. There are at least twenty known to be constantly in action, and the eruptions of some of them are occasionally terrible.

Bays.] The bay of Honduras is a very large body of water lying between the province of Honduras on the south, and the peninsula of Yucatan on the west. The gulf of Amatique is at the bottom of the bay of Honduras. The gulf of Dulce is still farther inland, and communicates with the gulf of Amatique through a narrow strait. The gulf of Papagayos is on the west coast of the province of Nicaragua. The gulf of Tehuantepec is farther north, in the narrowest part of the isthmus which separates the gulf of Mexico from the Pacific Ocean.

Sea Coast.] The coast of Nicaragua bordering on the Pacific Ocean is almost inaccessible in the months of August, September and October, on account of the terrible storms and rains; and in January and February, on account of the furious northeast winds called Papagayos. The gulf of Tehuantepec is also visited with hurricanes from the northwest, which are exceedingly inconvenient for navigators. The approach to the extensive coast of the bay of Honduras is attended with imminent danger, on account of the reefs and keys which are abundantly dispersed along it, and occasion numerous shipwrecks.

Lakes and Rivers.] Nicaragua lake is 140 miles long and covers an area of nearly 10,000 square miles. It discharges its waters at its S. E. extremity through the river San Juan into the Caribbean sea. It is of immense depth and navigable for the largest vessels. The lake of Leon lies N. W. of Nicaragua lake, and communicates with it through a short river.

The most important rivers are the *Rio Hondo* which falls into the bay of Honduras under $18^{\circ} 30'$ N. lat.; the *Belize* or *Main*, which joins the same bay about 60 miles farther south, and is navigable for 200 miles; the *Bluefields* which falls into the Caribbean sea near the parallel of 12° N. lat.; and the *Rio San Juan* which forms the outlet of Lake Nicaragua. The *Rio San Juan* is about 100 miles long, and with little expense might be made navigable through its whole extent. If this were done, a canal of only 10 or 12 miles across the isthmus which separates lake Nicaragua from the Gulf of Papagayos would open a water communication between the Atlantic and Pacific oceans.

British Territory.] The British claim the country called the Mosquito shore lying along the northern and eastern coast of the province of Honduras. The number of white settlers, however, is very small; the territory is occupied almost exclusively by the Mosquito Indians, a warlike tribe of about 5,000 souls, who are strongly attached to the British, and bitterly opposed to the Spaniards. The principal British settlement, and indeed almost the only regular establishment they have in this country, is the town of Belize, on the peninsula of Yucatan, near the mouth of the river of the same name. It consists of about 200 white inhabitants, 500 people of color and free blacks, and about 3,000 negro slaves. The sole occupation of these settlers is the cutting of mahogany and log-wood, with which the forests abound.

Soil and Productions.] The soil in general is extremely fertile, producing the sugar cane, cotton, indigo, cacao, maize, &c. in abundance. The British territory on the bay of Honduras has a fine soil, capable of producing all the richest products of tropical climates, but it has hitherto been celebrated only for its mahogany, and log-wood, no attempts having been made at cultivation.

Chief Towns.] *Guatemala*, the capital, is on a small river near the coast of the Pacific Ocean, in lat. 14° N. The city was originally built in a beautiful valley on the declivity of a mountain at whose summit was a volcano. In this situation, in the year 1751, it was overwhelmed by an earthquake. Notwithstanding this awful calamity, the surviving inhabitants rebuilt their favorite abode; but another and more tremendous convulsion again destroyed the devoted place in 1775, the greater part of the inhabitants being at the same time buried in the ruins. The city has since been rebuilt on the spot where it now stands, which is 25 miles to the south of the old town. It is a magnificent place, adorned with churches, monasteries and a university. Population about 40,000.

Chiapa de los Indios is the largest Indian town in Guatemala. It is in the N. W. extremity of the country, on the isthmus of Tehuantepec, about half way between the gulf of Mexico and the Pacific Ocean. It has about 20,000 Indian inhabitants, who are rich and enjoy many privileges. The celebrated Las Casas, the apostle of the Indians, was the first bishop of this place, and his memory is still dear to the inhabitants.

Ciudad Real is 36 miles E. of Chiapa. It is the see of a bishop and contains about 3,000 inhabitants. *Leon* is situated at the N. W. extremity of the lake of the same name, on a plain near a volcano, which has caused the town sometimes to suffer from earthquakes. The number of houses is 1200, and the population about 8,000. Its port, *Realejo*, is on the coast of the Pacific Ocean, at the mouth of a small river, about 20 miles distant. It is fortified, and has a good harbor.

Population.] The number of inhabitants is unknown. Humboldt supposes that it is the most populous part of Spanish America. Large districts, however, in the eastern half of the country are thinly inhabited by tribes of savage Indians. The whole population does not probably exceed 1,500,000, of whom two thirds are supposed to be Indians in a state of dependence on the Spaniards, like the Indians of New Spain.

Government and Religion.] Guatemala is subject to the government of a captain-general, who is appointed by the king of Spain. He is entirely independent of the viceroy of New Spain, being responsible only to his Catholic Majesty. The religion is the Roman Catholic, under one archbishop and six bishops.

WEST INDIES.

Situation.] The West India islands lie between Florida and the northern coast of South America. They extend from $9^{\circ} 53'$ to 23° N. lat. and from $59^{\circ} 30'$ to 85° W. lon. Trinidad is at the southern extremity; Barbadoes at the eastern, Maranilla reef at the northern, and Cuba at the western.

Divisions.] These islands are divided into four principal groupes as follows:

I. The GREATER ANTILLES, viz. Cuba, Hispaniola, Jamaica and Porto Rico.

II. The BAHAMAS, or LUCAYAS ISLANDS, consisting of all the islands lying north of Cuba and Hispaniola.

III. The CARIBBEAN ISLANDS, consisting of Trinidad and all the islands north of it, till you come to Porto Rico.—The Caribbean islands are subdivided into 1. The *Leeward islands*, consisting of Dominica and all the islands north of it. 2. The *Windward islands*, consisting of Martinico and all south of it. The five most western of the Leeward islands, viz. St. Thomas, St. John, Santa Cruz, Tortola, Virgin Gorda, and their dependencies, are also called *Virgin islands*.

IV. The LESSER ANTILLES, consisting of the islands lying along the coast of South America, west of Trinidad, viz. Margarita, Tortuga Saluda, Orchilla, Buen Aire, Curacoa and Oruba.

Extent and Population.] The following table shows the extent and population of all the important islands.

<i>Islands.</i>	<i>Sq. Miles.</i>	<i>Whites.</i>	<i>Mulattoes and Blacks</i>	<i>Total Pop.</i>
Cuba	54,000	234,000	198,000	432,000
Hispaniola	30,000	30,000	500,000	530,000
Jamaica	6,400	30,000	330,000	360,000
Porto Rico	4,140	30,000	20,000	100,000
The Bahamas	5,500	3,923	11,396	14,318
St. Thomas	40	550	4,500	5,050
St. John	40	180	2,250	2,430
Santa Cruz	100	2,223	29,164	31,387
Tortola	90			10,000
Virgin Gorda	80	1,500	6,500	8,000
Anguilla	30			800
St. Martin	90			6,100
St. Bartholomew	60	4,000	4,000	8,000
Saba	10			1,600
Barbuda	90			1,500
St. Eustatius	22	5,000	15,000	20,000
St. Christopher	70	4,000	21,000	25,000
Nevis	20	1,000	10,000	11,000
Antigua	93	2,102	33,617	35,739
Montserrat	47	1,000	9,750	10,750
Guadaloupe	675	12,747	102,092	114,839
Desada	25	300	600	900
Mariagalante	90	1,938	10,347	12,385
Dominica	29	1,594	24,905	26,499
Martinico	370	9,906	87,907	96,413
St. Lucia	225	1,290	15,350	16,640
St. Vincent	131	1,450	22,500	24,000
Barbadoes	166	16,289	65,650	81,939
Grenada	109	771	30,591	31,362
Tobago	140	900	15,583	16,483
Trinidad	1700	2,261	24,264	26,477
Margarita	354	5,500	6,500	14,000
Curacao	600	1,500	7,500	8,500
Total.	105,000	450,000	1,500,000	2,050,000

Very few of the original inhabitants are now to be found. In Margarita there are about 2,000; in Trinidad 1200; in St. Vincent 300, and a few more are scattered over the other Caribbean islands.

Provinces.] Cuba and Porto Rico belong to Spain; St. Thomas, St. John and Santa Cruz to Denmark; St. Martin, Saba, St. Kittatus and Curacao to Netherlands; St. Bartholomew, to Sweden; Guadaloupe, Desada, Mariegalante and Martinico to France; and Margarita to Curacao. The eastern part of Hispaniola belongs to Spain, and the western part is independent. The arch-

western part of St. Vincent belongs to Great Britain, and the northeastern part is independent. Jamaica, the Bahamas and all the other islands belong to Great Britain.

Religion.] A majority of the whites in these islands are Roman Catholics; all those in Cuba, Hispaniola and Porto Rico are of this description, and a majority in all the islands settled by the Spaniards and the French. In those settled by the Dutch, Danes, Swedes and English the Protestant religion is established. In the English islands the Wesleyan Methodists have been employed for some time with much success in instructing the slaves. In 1816 there were 36 missionaries of this denomination. The Moravians had also, in 1816, 15 missionaries in the different islands.

Climate.] Edwards divides the West Indian year into four seasons of very different length. The spring commences with the month of May. The first periodical rains set in about the middle of the month; they come from the south, commonly fall every day about noon, and break up with thunder storms towards evening, creating a bright and beautiful verdure, and a rapid and luxuriant vegetation. They continue about a fortnight. Summer commences about the first of June. The weather is now dry and settled, and not a cloud is to be seen. The heat is insupportable in the morning till about 10, when the sea breeze sets in and blows with great force and regularity from the S. E. till late in the evening. During its prevalence the climate in the shade becomes tolerable. At this season the clearness and brilliancy of the heavens by night, and the serenity of the air produce the most calm and delightful sensations. About the middle of August the diurnal breeze begins to intermit, and the atmosphere becomes sultry and suffocating. During the remainder of the summer, which may be considered as lasting till the latter part of September, coolness and comfort are sought in vain; instead of a regular breeze from the sea, there are faint breezes and calms alternately. The rains commence in the beginning of October. The heavens pour down cataracts, and the earth is deluged. These violent rains last through the greater part of November. The hurricane season comprises the months of August, September, and October. About the first of December a considerable change is perceived in the temperature of the air, and a new season commences which lasts till the end of April. The weather is steadily serene and pleasant, and the temperature cool and delightful. This lasts till the month of May, and is to the sick and to the aged the climate of paradise. In the large islands there are some exceptions to these remarks.

Soil and Productions.] The soil is in general very fertile. Sugar is the capital object of agricultural attention. The articles next in importance are cotton, indigo and coffee, and after them cacao, ginger, allspice, annatto, aloes, pimento, cloves and cinnamon. Maize, yams and sweet potatoes are also extensively raised in the field for home consumption.

I. GREATER ANTILLES.

1. CUBA.

Situation and Extent.] Cuba is the largest and most western of the West India islands. It lies between $19^{\circ} 45'$ and 23° N. lat. and between $74^{\circ} 2'$ and 85° W. lon. It is 700 miles long and in the widest part 150 broad, and contains about 54,000 square miles. It is separated from the Bahama bank on the N. E. by the old Bahama Channel, and from Hispaniola on the E. by the Windward Channel.

Capes and Bays] The most noted capes are cape *San Antonio* at the western extremity of the island; cape *Maysi*, in the east; and cape *Cruz*, in the south. The largest bay is that of *Bayamo* on the south side of the island. *Xagua* bay, on the same side of the island, but further to the N. W. is one of the best in the West Indies.

Face of the country.] A chain of mountains extends from east to west through the whole length of the island from cape *Maysi* to cape *San Antonio*, dividing it into two parts. At the foot of these mountains the country opens into extensive meadows.

Soil and Productions.] The soil is of great fertility and the fields are always covered with flowers and odoriferous plants. Sugar is the principal production. Coffee began to be planted in Cuba after the destruction of the coffee plantations in St. Domingo, and the amount raised in 1803 was 13 million pounds. Tobacco grows to great perfection; it is exported to Europe in leaf, snuff and cigars, and is held superior to the tobacco of other parts of America. Numerous herds of cattle feed on the extensive meadows, and are hunted chiefly for their skins, 10 or 12,000 of which are annually exported. Honey and wax are also among the exports.

Chief towns.] *Havana*, the largest town, is on the N. side of the island, about 80 leagues from cape *San Antonio*. Its harbor is one of the best in the world, being deep enough for vessels of the largest class, sufficiently capacious to receive a thousand ships of war, and so safe that vessels ride securely without cable or anchor. The entrance is by a channel half a mile long, and so narrow that only a single vessel can enter at once. It is fortified through the whole distance with platforms, works and artillery. The mouth of this channel is secured by two strong castles. The town is situated on the west side of the entrance of the harbor, and is surrounded with ramparts, bastions and ditches. A square citadel is erected near the centre of the city, in which the treasures of the government are deposited. The shape of the town is semicircular, the diameter being formed by the shore. It contains 11 churches all richly ornamented, several monasteries and convents, 2 hospitals and numerous other public buildings. The

commerce of the town is more extensive than that of any other in Spanish America. The population is estimated at 70,000.

St. Jago de Cuba, on the south side of the island, near the eastern extremity, has a good harbor defended by a castle. It was formerly the capital of the island, but has now fallen into decay, and the commerce and government have been transferred to the Havana. Population between 30 and 40,000.

Bayamo or St. Salvador is on a river which falls into a large bay of the same name on the south coast. It contains 12,000 inhabitants. *Villa del Principe*, the seat of a royal audience, stands near the centre of the island. *San Carlos de Matanzas*, about 20 leagues E. of the Havana has a good port and 7,000 inhabitants.

Population and Religion.] The population of Cuba has greatly increased within the last 50 years. In 1774 it amounted only to 171,628, including 44,328 slaves and 5 or 6,000 free negroes. In 1804 there were 234,000 whites, 90,000 free blacks, and 108,000 slaves; in all 432,000. The number of negroes imported into the island from 1789 to 1803 was more than 76,000. The religion is Roman Catholic. There are two bishoprics, one comprehending the eastern and the other the western half of the island.

Political Importance.] The Spanish government have laid it down as a principle that the dominion of the island of Cuba is essential to the preservation of New Spain. There being no harbor on the whole eastern coast of New Spain, that country is in a military dependence on the Havana, which is the only neighboring port capable of receiving squadrons. Accordingly, enormous sums have been expended in strengthening its fortifications.

2. HISPANIOLA OR ST. DOMINGO.

Situation and Extent.] Hispaniola is situated between the islands of Jamaica and Cuba on the west, and Porto Rico on the east, and extends from $17^{\circ} 50'$ to 20° N. lat. and from $68^{\circ} 35'$ to $74^{\circ} 15'$ W. lon. It is 390 miles long from E. to W. and 160 in its greatest breadth, and contains about 30,000 square miles.

Divisions.] The island was formerly divided between the French and Spaniards; the French occupying the western and much the smallest division, and the Spaniards the eastern. In 1791 an alarming insurrection broke out among the negroes in the French part of the island, which issued in the course of a few years in the complete expulsion of the French. The negroes declared themselves independent, and gave to their part of the island the name of Hayti. Hayti was recently divided into two distinct governments under two rival chiefs, president Petion and king Christophe, the former occupying the southwestern part of the island, and the latter the northwestern part. These chiefs

are now both dead, and the island has become the theatre of new revolutions.

Capes and Bays.] At the N. W. extremity of the island is cape St. Nicholas or the Mole; in the N. E. old cape Francois or Cabo Viejo Francois; in the S. E. cape Engano; and in the S. W. cape Tiburon. On the eastern side of the island, between old cape Francois and cape Engano the most prominent points are cape Cabran, cape Samana, and cape Raphael. On the south side are cape Espada, a little S. W. of cape Engano; cape Mondon, the most southern point of the island, and point Abacou a little S. E. of cape Tiburon. On the western coast are cape Dame Maria, a little N. of cape Tiburon, and cape St. Marc near lat. 19° N. Point Isabella on the northern coast is the most northern extremity of the island.

Samana bay sets up at the E. end of the island between cape Samana on the N. and cape Raphael on the S. The Bite of Leogane is a very large bay at the west end of the island setting up between cape Maria on the S. and cape Nicholas on the N.

Rivers.] The river Yuna flows upwards of 70 miles through the beautiful and fertile valley of Vega Real in an E. S. E. direction and falls into the bay of Samana. The *Monte Christi* heads near the Yuna and runs W. N. W. about the same distance to the bay of Monte Christi. The Ozama runs in a S. S. E. direction, and discharges itself just below the city of St. Domingo. *Artibonite* river rises near the centre of the island, and flowing west discharges itself into the Bite of Leogane a little N. of Cape St. Marc.

Face of the country.] An elevated chain of mountains called the Cibao mountains commences near cape St. Nicholas, and pursuing a S. E. direction across the island terminates near cape Espada. Three summits near the centre of the range are said to be about 6,000 feet above the level of the sea. A western spur from the principal range ends at cape St. Marc. A chain in the N. E. called Monte Christi commences at the bay of the same name and terminates at the bay of Samana. In the eastern part of the island are extensive plains or savannahs. Eastward from the city of St. Domingo they stretch out to the extent of 80 miles in length by 20 or 25 in breadth.

Soil and Productions.] The soil in general is well watered and fertile in the highest degree, producing every variety of useful vegetable. The plains alone, in the Spanish part of the island, according to Edwards, are capable of producing more sugar and other valuable commodities than all the British West Indies put together; and nothing is wanting to render these fertile districts a scene of successful cultivation, but a suitable degree of industry and enterprize among the Spanish colonists. They are sunk, however, into a state of such deplorable indolence that a great part of the country is merely a beautiful wilderness, occupied by immense herds of swine, horses and horned cattle. The principal agricultural productions are sugar, coffee and cotton, which are raised in abundance and of a fine quality.

Climate.] The climate is moist and hot, the thermometer in the plains rising as high as 99°, but on some of the highest mountains in the interior the heat is not oppressive, and a fire is even at times found necessary. Hurricanes are seldom experienced. The climate is frequently fatal to Europeans, particularly on the sea coast, and has proved a powerful ally to the blacks when they have been invaded.

Chief Towns.] *Cape Henry*, formerly *Cape Francois*, is on the N. side of the island, about 30 leagues E. of Cape St. Nicholas, on a promontory, at the edge of a large plain 60 miles long and 12 broad. Its harbor is one of the most secure and convenient in the whole island. Before the revolution it was the largest town in the French part of the island, containing between 800 and 900 houses of stone or brick, and 20,000 inhabitants. The plain on which the town is placed is well watered and highly cultivated.

Port au Prince is at the bottom of the Bite or large bay which sets up on the west side of the island. It has an excellent harbor, but the situation is low and marshy, and the climate unhealthy. To the east of the town is the noble plain of Cul de Sac from 30 to 40 miles in length by nine in breadth, and containing numerous sugar plantations. Population 20,000.

St. Domingo, the capital of the Spanish part of the island, is on the west bank of Ozama river, and was formerly a flourishing city, but is now in a state of decline. The cathedral is a noble Gothic pile, in which the ashes of Columbus rested till 1796, when they were removed to the Havana. The harbor is large but not very secure. Population about 12,000.

The Mole is a port in the N. W. part of the island, 6 miles E. of Cape St. Nicholas. Though inferior in many respects to Cape Henry and Port au Prince, it is the safest harbor on the island in time of war, being strongly fortified both by nature and art. The situation is remarkably healthy.

Leogane, 30 miles W. by S. of Port au Prince in a beautiful valley half a league from the sea, was formerly a place of considerable commerce. *St. Mark* is a pleasant town, at the head of a small bay of the same name, 40 miles N. W. of Port au Prince. *Monte Christi* on the N. coast, near a cape and island of the same name, in the Spanish part of the island, was formerly a noted resort of smugglers.

Population.] The French part of the island contained in 1789, according to the estimate of Edwards, 30,831 whites, 24,000 mulattoes, and 480,000 slaves; in all, 534,831. The Spanish part contained in 1785, according to census, 152,640; in 1796, according to Alcedo 125,000, of whom 110,000 were free and 15,000 slaves. The population in both parts of the island is supposed to have declined within the last 30 years, and may now be estimated at 30,000 whites and 500,000 blacks.

Religion.] The established religion in all parts of the island is the Roman Catholic; but the late king Christophe tolerated every denomination in his dominions, and the instructors employed

by him in his schools were Englishmen of the Episcopal church. The Wesleyan Methodists have also employed missionaries both in Christophe's and Petion's dominions, special permission having been obtained for that purpose.

Education.] Great efforts were made by Christophe, the late king, for the education of his subjects. A royal free school was established at St. Marks, and twelve public schools in the principal towns of the kingdom, in which several thousand children are now taught the English and French languages, and the elements of mathematics, under instructors sent out from England. A royal college has also been established and liberally endowed at Cape Henry, the capital of the kingdom, in which provision is to be made for instruction in all the languages, arts and sciences usually taught in European and American colleges. In 1818 there were 40 scholars in the college, who were selected from among the best in the common schools. Besides the above, the king caused schools to be established in every village in his kingdom.

Government and Army.] Henry Christophe, the late king of Hayti, under the title of Henry the First, usually resided and held his court at Sans Souci, a village about 15 miles from Cape Henry, where he built a spacious and handsome palace. He was an absolute monarch. An hereditary nobility formed the first class of his subjects, and all the proprietors of landed estates had great authority over the cultivators of the soil, who were held in a species of slavery. The government of the southwestern division of the island was elective, and Petion, the chief magistrate, was styled President of Hayti. Petion and Christophe are now both dead and their dominions are in an unsettled state. Various propositions have been recently made by the French government for the purpose of bringing the inhabitants to their former subjection, but they have all been rejected with disdain. The regular army of each of the sovereigns was about 10,000 men.

Commerce.] In 1789 the French employed in the trade of St. Domingo 710 vessels, navigated by 18,466 seamen. The value of the exports in 1791 was £5,371,593; the principal articles were coffee to the amount of 84,617,328 pounds; sugar, 217,463 casks; indigo, 3,257,610 pounds; cacao, 1,536,017 pounds; cotton 11,317,226 pounds. Since the revolution the commerce has greatly declined. From 1804 to 1808, according to Walton, only about 75 vessels arrived annually, with cargoes amounting to about £150,000. The principal article of exportation from the Spanish part of the island is the produce of horned cattle, which have multiplied to such a degree that they are slaughtered for their skins.

3. JAMAICA.

Situation and Extent.] Jamaica lies about 30 leagues south of Cuba, and the same distance west of St. Domingo, between 17°

40' and 18° 30' N. lat. and between 76° 13' and 78° 57' W. lon. It is of an oval form, about 150 miles long, and on an average more than 40 broad, containing 6,400 square miles, or 4,090,000 acres.

Divisions.] The island is divided into three counties as follows :

<i>Counties.</i>	<i>Towns.</i>	<i>Parishes.</i>	<i>Villages.</i>
Cornwall	3	5	6
Middlesex	1	8	13
Surry	2	7	8
Total	6	20	27

Face of the Country.] A range of lofty mountains called the Blue mountains, runs through the whole island from E. to W. and rises in some of its most elevated peaks to the height of more than 7,000 feet above the level of the sea. The aspect of the country on the opposite sides of this range is widely different. On the N. side of the island the land rises from the shore into hills and swells, which are remarkable for their beauty, being all of gentle acclivity and commonly separated from each other by spacious vales, and romantic rivulets. As you proceed towards the interior the land becomes more elevated, and is clothed with almost boundless forests ; and in the centre of the island it rises into lofty mountains whose heads are lost in the clouds. The southern front of the main ridge of the Blue mountains is generally rough and craggy ; but as you descend on the south side you meet with several lower ridges, running parallel with the principal one, the summits of which are more round and smooth, and at the foot of the lowest ridge lie vast plains or savannahs bounded only by the ocean, and displaying all the pride of the richest cultivation.

Soil and Productions.] A large portion of the soil in this island is unfit for cultivation. Out of 4,090,000 acres which the island contains, only about 2,000,000 have been granted to individuals by the crown, and even all of these are not improved. In 1791 the lands in cultivation were distributed nearly as follows :

767 sugar plantations, averaging 900 acres each	690,000
1000 breeding and grazing farms, at 700 each	700,000
plantations of cotton, coffee, pimento, ginger, &c.	350,000
	<hr/> 1,740,000

Edwards supposes that the remaining acres, amounting to 2,350,000, are chiefly unfit for cultivation, not so much on account of the barrenness of the soil as of its mountainous situation. Indeed almost all of the waste land is covered by a rich, strong growth of timber. The land actually cultivated has a deep and very fertile soil.

Rivers.] The island is well watered. There are about 100 rivers which take their rise in the mountains and run commonly with great rapidity to the sea on both sides of the island. None

of them are navigable except for boats.—Black river, which discharges itself in the S. W. part of the island, about 20 miles W. of Pedro bluff, is the deepest and largest. It is navigable for flat-bottomed boats and canoes about 30 miles.

Climate.] The climate of the coast is hot and sultry. This is particularly true of the plains on the southern coast, where the average temperature from June to November inclusive, is 80° and but little cooler in the other six months. In the interior it is more temperate. On the highlands about eight miles from Kingston, the thermometer seldom rises above 70°, and about six miles farther at the height of 4200 feet above the level of the sea, it averages from 55° to 65°.

Chief Towns.] *Spanishtown* or *St. Jago de la Vega*, the capital of the island, stands on the river Cobre, six miles from its entrance into Kingston harbor. Population about 5000.

Kingston is on the south coast of the island, about 10 miles E. of Spanishtown, on the north side of a beautiful harbor, in which vessels of the largest burden may anchor in safety. It was founded in 1693, after the destruction of Port Royal by an earthquake in the preceding year. It is built on a plain, which commences on the shore and rises with a gradual ascent to the foot of the Liguanea mountains, a distance of about six miles. This plain is covered with the country residences of the principal inhabitants and with sugar estates. The population of the town is 33,000, of which number, 10,000 are whites, 18,000 slaves, 2,500 people of color, and 2,500 negroes.

Port Royal stands at the extremity of the long and narrow peninsula which bounds Kingston harbor on the south, about 10 miles S. W. of the town of Kingston. It has an excellent harbor, in which a thousand ships could anchor with convenience. It once contained 2,000 houses, but in June 1692 a dreadful earthquake overwhelmed the town, and buried nine tenths of it eight fathoms under water. It was, however, rebuilt, but about 10 years afterwards it was laid in ashes by a terrible fire, and in 1722, one of the most dreadful hurricanes ever known, reduced it a third time to a heap of rubbish. Though once a place of the greatest wealth and importance in the West Indies, it is now reduced to three streets, a few lanes, and about 200 houses. It still contains, however, the royal navy yard, the navy hospital, and barracks for a regiment of soldiers. The fortifications are remarkably strong and are kept in excellent order.

Montego bay, in the N. W. part of the island, is a flourishing commercial town with about 230 houses. In 1795 it was almost destroyed by an earthquake. *Savannah la Mer* in the S. W. has good anchorage for large vessels. It was almost destroyed by a dreadful hurricane and inundation of the sea in 1780.

Population.] In 1812, according to an official return there were 319,912 slaves, and the number of whites and free people of color was estimated at 40,000, making a total of nearly 360,000.

Religion.] The bishop of London claims this and the other British West India islands, as a part of his diocese; but his jurisdiction is renounced by the laws of Jamaica. The governor, as head of the provincial church, inducts into the various rectories. The United Brethren, the Baptists, and the Methodists employ missionaries here, principally among the negroes.

Government.] The legislature of Jamaica is composed of the governor, of a council nominated by the crown, consisting of 12 gentlemen, and a house of assembly containing 43 members, who are elected by the freeholders. A bill becomes a law as soon as the governor's assent is obtained, but if the royal disapprobation is afterwards officially signified, it ceases to be valid.

Commerce.] The most important exports are sugar, rum, molasses and coffee, and next to these cacao, cotton, indigo, pimento and ginger. The amount of sugar exported has gradually increased from 11,000 hhds. in 1742 to 140,000 in 1802. In 1791 the coffee exported amounted to about 600,000 lbs.; in 1807 it had increased to 28,500,000 lbs.

4. PORTO RICO.

Situation and Extent.] Porto Rico, called by the natives *Boriqua*, lies to the E. of Hispaniola, between $17^{\circ} 54'$ and $18^{\circ} 30'$ N. lat. and between $65^{\circ} 30'$ and $67^{\circ} 45'$ W. lon. It is 115 miles long from E. to W. and has a mean breadth of 36, containing 4,140 square miles. Its shape is nearly that of a parallelogram.

Face of the Country, Soil, &c.] The country is pleasantly diversified with hills and vallies. The soil is generally fertile. The principal agricultural productions are sugar, cotton, rice, maize, and tobacco. Hurricanes are not unfrequent, and are sometimes very destructive.

Chief Town.] *St. Juan de Porto Rico*, the capital, is on the north side of the island, about 15 leagues west from cape St. Juan. It stands on a peninsula in a spacious bay, and is connected with the main land by an isthmus of considerable length. The harbor is spacious and safe, and admits vessels of any burden. The entrance is less than half a mile wide, and the fortifications are strong and commanding. The population is variously estimated from 10 to 30,000.

Population.] The population in 1778 was 80,660. In 1795 it received a large accession from St. Domingo, many of the Spanish inhabitants of that island removing hither. At present it is supposed to exceed 100,000.

Government.] Porto Rico is a captain generalship. Originally, with Cuba, it was a part of the viceroyalty of Mexico; then it was attached to the government of Cuba; and finally made a distinct province.

II. BAHAMAS.

Situation and Extent.] The Bahama islands lie directly north of the Greater Antilles, and are separated from Cuba by the Old Bahama channel, and from Florida by the New Bahama channel or Gulf of Florida. They lie between lat. 20° and 28° N. and between lon. 69° and 80° W.

Banks and Keys.] There are two noted banks in these seas; the Great and Little Bahama banks. The Great Bahama bank lies between lat. $21^{\circ} 40'$ and 26° N. and between lon. $74^{\circ} 50'$ and $80^{\circ} 20'$ W. Its length, from Verde key in the S. E. to Isaacs' key in the N. W. is 450 miles. Its breadth in the south is about 140 miles. A little north of the tropic it is divided by an arm of deep water called Providence bay, which is 100 miles long from S. E. to N. W. and about 30 broad, and opens on the N. W. side of New Providence into the N. E. channel. The Old Bahama channel separates this bank from Cuba, and the New Bahama channel from Florida; the N. W. channel on the N. divides it from the Little Bank; Rock sound and Exuma sound on the N. E. separate it from Eleuthera and Guanahani. Little Bank is bounded by the New Bahama channel on the W.; by the N. W. channel on the S.; by the N. E. channel on the S. E. and the Atlantic ocean on the N. E. Its length, from the Hole in the Wall in the S. E. to Maranilla Reef in the N. W. is about 180 miles. The depth of water on the Great Bank varies from one to seven fathoms; on the Little Bank from three to twelve.

The Keys or Kays are rocks or sand islands scattered in great profusion over this part of the ocean. Their number has been computed at 700. The larger and more remarkable have received appropriate names; the rest are known only by the generic name of Keys.

Islands.] Besides the Keys already mentioned, the Bahamas consists of 14 islands or groupes of islands. The following are their names arranged in geographical order, beginning in the S. E.

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|--------------------------|-----------------------------------|
| 1. Turks islands. | 8. Watling's island. |
| 2. Caicos. | 9. Guanahani or St. Salvador. |
| 3. The Inaguas. | 10. Eleuthera and Harbor islands. |
| 4. Mayaguana. | 11. New Providence. |
| 5. Crooked island groupe | 12. Andros. |
| 6. Long island. | 13. Abaco. |
| 7. Exuma. | 14. Great Bahama. |

Turks islands are famous for their salt ponds, which in some years have yielded more than 30,000 tons of salt for exportation. Guanahani, called by Columbus St. Salvador, and by the English sailors Cat island, is celebrated as the spot where Columbus first landed in the new world.

Face of the Country, Soil, &c.] These islands are heaps of limestone and shells, covered with vegetable mould. The Keys are chiefly rocky and sandy: on some of them a few trees are found. All the large islands that front directly upon the Atlantic stretch from S. E. to N. W. and the ridge of each is in the same direction. The soil of all the islands is a thin but rich vegetable mould. It yields for a few years luxuriantly, but is soon exhausted. The chief production is cotton.

Navigation.] Owing to the immense number of sand banks, rocks, and breakers, every where dispersed over these seas, the navigation is extremely dangerous, and thousands of vessels have been wrecked here. Vessels bound to New Orleans from the United States first make for the Hole in the Wall, the southern point of Abaco. Proceeding through the N. E. channel, they enter on the Great Bank S. of Berry islands, and leave it S. of the Cat Keys, whence they make for the Havana. Those bound to Jamaica pass to the leeward of Crooked island, between it and the Great Bank, and leaving the Inaguas on the left make for the Windward channel between Cuba and Hispaniola.

Population and Occupations.] In 1803 the population consisted of 3,923 whites and 11,395 blacks; in all, 14,318. The inhabitants are divided according to their occupations into two classes, *residents* and *wreckers*. The residents are chiefly loyalists and their descendants, who emigrated from Carolina and Georgia at the close of the American war. The wreckers are constantly employed in the business of rescuing shipwrecked vessels with their crews and cargoes from the waves. They sail in small flat bottomed sloops, just fitted for the seas which they navigate. They are excellent sailors, are familiar with all the Keys, shoals and breakers; and with alacrity and courage encounter any danger or hardship. They are licensed by the governor, and receive salvage on all property rescued from the waves. The number of these vessels is very great, 40 sail being sometimes seen in one inlet. By day they are always cruising, at night they usually put into the nearest harbor. Their great places of rendezvous are the Florida Gulf, the Hole in the Wall, and the Hogsties. The Hogsties are small keys, with reefs of rocks on each side in the form of a horse-shoe, which form a harbor, in lon. 74° W. about half way between Grand Inagua and South Crooked island.

III. CARIBBEAN ISLANDS.

A. LEEWARD ISLANDS.

1. *St. Thomas*, about 12 leagues E. of Porto Rico, is 9 miles long and contains about 40 square miles. The soil is well water-

ed and fruitful. The number of plantations is 74, of which 40 are devoted to the cultivation of sugar, and 34 to that of cotton. The population in 1815 was estimated at 5,050, of which number 550 were whites, 1500 free negroes and 3,000 slaves. St Thomas, the chief town, is on the S. E. side of the island, and has a safe and commodious port in which 200 ships can be accommodated.

2. *St. Johns*, 6 miles S. E. of St. Thomas, contains about 40 square miles. The soil produces sugar, coffee, tobacco and cotton. The population is 2430, of which number 180 are whites, 50 mulattoes and 2200 negroes.

3. *Santa Cruz* or *St. Croix* lies south of St. Johns, and contains about 100 square miles. The soil is tolerably fruitful and is divided into 346 plantations. The principal productions are sugar and cotton. The population in 1813 was 31,387 of whom 2,223 were Danes, 1,164 mulattoes and free blacks, and 28,000 slaves. Christianstadt, the chief town, and capital of all the Danish West India islands, is on the north coast. It has a harbor, a fort, 660 houses and 5,000 inhabitants.

The value of all the property, public and private, in the three Danish islands, is estimated at £5,014,440, viz. *Santa Cruz* £3,728,640; *St. Thomas* £747,800; and *St. John* £538,000.

4. *Tortola* lies N. E. of St. Johns, and is 15 miles long by 6 broad. It is well cultivated, and is one of the healthiest islands in the West Indies. It has a large and safe harbor on the S. E. side. The productions are sugar and cotton. Population about 10,000.

5. *Virgin Gorda* is 8 miles E. of Tortola. It is 15 miles long and produces sugar and cotton. The population is stated at 8,000. *Antegada*, the largest of its dependencies, is low and almost covered by water at high tides.

The five preceding islands are called The *Virgin islands*.

6. *Anguilla* or *Snake* island, so called from its winding tortuous figure, is about 30 miles long. It produces sugar, cotton, tobacco and maize, and has about 800 inhabitants. It belongs to the British.

7. *St. Martin*, 5 miles south of Anguilla, is 15 miles long and contains about 90 square miles. It produces sugar, cotton, and tobacco, but is principally valuable for its salt pits. The island was formerly divided between the Dutch and French, and afterwards between the Dutch and English, but it now belongs wholly to the king of the Netherlands. The population, amounting to 6,100, consists partly of Dutch and French, partly of mulattoes and negroes.

8. *St. Bartholomew* is a small island, 15 miles S. E. of St. Martin, containing about 60 square miles. It was first settled by the French in 1648, but in 1785 was ceded to Sweden, to whom it still belongs. It produces sugar, cotton, cacao, tobacco and manioc, also iron wood, and lignumvitae. There is no lake or spring on the island. The inhabitants depend on the skies for water, which they keep in cisterns, and when they fail, it is procured from St.

Christopher. The shores are dangerous and cannot be approached without a good pilot. The only port is Le Carenage, on the west side, near which stands Gustavia the principal town. Gustavia is inhabited by Swedes, English, French, Americans and Jews. The planters are chiefly French. The population is about 8,000, two thirds of whom are negro slaves.

9. *Saba*, a small island, 12 miles in circumference, lying 30 miles S.W. of St. Bartholomew, belongs to Netherlands, and is dependent on the neighboring island, St. Eustatius. It consists of a delightful valley which produces the necessaries of life, and the materials for several manufactures, but being destitute of any port, its commerce is very inconsiderable. The sea is shallow and full of rocks for some distance from the coast, and none but small vessels can approach very near. The access to the interior of the island is by a difficult road cut out of the rock, by which only one person can ascend at a time. The population is estimated at 1,600.

10. *Barbuda*, belonging to the English, is 20 miles E. S. E. of St. Bartholomew, and is 21 miles long. The land is low but fertile, and produces cotton, pepper, indigo, tobacco and especially cocoa trees, which are here extremely fine. There is no harbor, but a well sheltered road on the west side. It belongs to the Codrington family, by one of whom the revenue arising from this island, and from several other plantations, was bequeathed to the society for propagating the Gospel. The population is estimated at 1500.

11. *St. Eustatius*, 12 miles S. E. of Saba, and 9 N. W. of St. Christopher, is a huge rock rising out of the waves in the form of a pyramid, 29 miles in circumference. Sugar, cotton and maize are raised here, but the principal production is tobacco, which is cultivated on the sides of the pyramid to its very top. There is but one landing place, and that though difficult of access, is strongly fortified. The number of inhabitants is 20,000, of whom 5,000 are whites, chiefly Dutch, and 15,000 negroes. The island was taken by the English in 1801 but in 1814 was restored to the king of the Netherlands.

12. *St. Christopher*, called by sailors *St. Kitts*, is 9 miles S. E. of St. Eustatius, and contains 43,276 acres, or almost 70 square miles. The interior of the island consists of many rugged precipices and barren mountains. Mount Misery, the loftiest summit, rises 3,711 feet above the level of the sea. It is evidently a decayed volcano. Near the shore, the country is level and the soil extremely fertile, no part of the West Indies being so well suited to the production of sugar. Particular spots have been known to yield 5 hhds. of 16 cwt. each to the acre, and a whole plantation has yielded 4 hhds. to the acre. Of the 43,276 acres which the island contains, 17,000 are devoted to sugar, 4,000 to pasturage and perhaps 2 or 3,000 to cotton, indigo and provisions; the rest is unfit for cultivation. The population in 1794 was 25,000, of whom 4,000 were whites, and 21,000 negroes. Basseterre, the capital, is on the S.W. coast, at the mouth of a river

opening into a bay called Basseterre road. It contains 800 houses, and is defended by three batteries. The island was formerly divided between the English and the French, but after much contention, the whole, in 1713, was finally ceded to the English, by whom it is still retained.

13. *Nevis*. This beautiful little spot is nothing more than a single mountain, rising like a cone in an easy ascent from the sea, 3 miles S. E. of St. Christopher. The circumference of its base does not exceed 24 miles. It is well watered and the land in general is fertile. About 8000 acres are devoted to the cultivation of sugar, and the annual crop is 4,000 hhds. The island was undoubtedly produced by a volcano, for there is a crater near the summit still visible. The population consists of about 1,000 whites and 10,000 negroes. Charlestown, the capital, is on the west side of the island, and is defended by a fort. The island belongs to Great Britain.

14. *Antigua*, 16 leagues E. of Nevis, and 18 E. by S. of St. Christopher, is 50 miles in circumference and contains $93\frac{1}{2}$ square miles, or 59,838 acres, of which 34,000 are appropriated to sugar, a small part is unimprovable, and the rest is devoted to cotton, tobacco and pasture. The population in 1817 according to official returns was 35,739, of whom 2,102 were whites, 2,185 free blacks and people of color, and 31,452 slaves. St. Johns, the capital, is built on the west shore on an excellent harbor, the entrance to which is defended by a fort.

Antigua constitutes along with St. Christopher, Nevis, Montserrat, and those of the Virgin islands which belong to the English, a separate government. The governor, who is styled captain general of the leeward Caribbean islands, generally resides at Antigua, and occasionally visits the other islands.

15. *Montserrat*, 7 leagues S. E. of Nevis and 8 S.W. by W. of Antigua, is 9 miles long, and contains about 30,000 acres or nearly 47 square miles, almost two thirds of which are mountainous or barren. Of the cultivated land, about 6,000 acres are appropriated to sugar, 2,000 to cotton, 2,000 to provisions, and 2,000 to pasturage. The population in 1805 was 10,750, of whom 1,000 were whites, 250 people of color, and 9,500 slaves.

16. *Guadaloupe* consists really of two islands nearly equal in size, divided by a short and narrow channel called the Salt river. That part of the island which lies N. E. of this channel is called Grand Terre; that on the S. W. Basse Terre. The channel which separates them is more than 6 miles long, and in some places not more than 90 feet broad. It runs north and south, and communicates with the sea at each end by a large bay. Both divisions of the island are of volcanic origin, and covered with rugged mountains, particularly Basse Terre, in which the volcano La Souffriere or the brimstone mountain rises to a great height, and continually throws out thick black smoke mingled with fire. Basse Terre is much the most fertile part, being well supplied with water which fails in Grand Terre. The produce is the same with that of the other West India islands. In 1810 the ex-

ports consisted of 12,700,437 lbs. of sugar, 1,334,387 gallons of rum and molasses, 2,661,726 lbs. of coffee, 112,208 lbs. of cotton, and 2,162 lbs. of cacao. The population, in 1812, according to an official return made to the British House of Commons, was 114,839, of whom 12,747 were whites, 94,328 slaves, and 7,764 free negroes. The island was originally settled by the French in 1635. It has been repeatedly taken by the English and the last time in 1810; but in 1814 it was restored to France.

17. *Desenda* and *Mariegalante* are dependencies of Guadalupe. *Desenda* is 12 miles long and 6 broad. It lies 12 miles N. E. of point Chateau the eastern extremity of Guadalupe, and contains about 900 inhabitants. *Mariegalante* is of a circular form, 14 miles in diameter. It lies 15 miles S. of Guadalupe, is very fertile in sugar, coffee, cotton, &c. and contained in 1788, 12,385 inhabitants, of whom 1,938 were whites, 226 people of color and 10,121 slaves.

18. *Dominica* lies 30 miles S. S. E. of Guadalupe. It is 20 miles long, and contains 186,436 acres or 29½ square miles. It has many high and rugged mountains, though it is interspersed with fertile valleys, and watered by upwards of 30 rivers. Several of the mountains contain unextinguished volcanoes. Coffee is the great object of agriculture. In favorable years the island has produced 3,000,000 lbs. There are 200 plantations devoted to coffee and 50 to sugar. The population in 1805 consisted of 1,594 whites, 2,822 people of color, and 22,083 slaves; in all 26,499. The island belongs to the British.

B. WINDWARD ISLANDS.

1. *Martinico* lies 10 leagues S. S. E. of Dominica. It is 50 miles long from N. W. to S. E. and contains about 370 square miles. The island is very uneven and intersected in all parts by hills, which are chiefly of a conical form. Three mountains rise above these smaller eminences, one of which in the N. W. is obviously an extinguished volcano. The soil is generally very good and well watered. The principal productions are sugar, coffee, cassia, cotton, cacao, ginger, &c. The population in 1810, according to an official return, was 96,413, of whom 9,206 were whites, 8,630 free persons of color, and 78,577 slaves. Fort Royal, the capital, is on the west coast, on a large bay which forms one of the best harbors in the West Indies. St. Pierre, also on the west coast, 15 miles N. W. of Fort Royal, is a port of entry and the most commercial town on the island. It contains about 2,000 houses and 12,000 inhabitants. The harbour is easy of access but unsafe in storms. Martinico was settled by the French in 1635. It has repeatedly fallen into the hands of the English, but has always been restored to France to whom it now belongs.

2. *St. Lucia* lies 9 leagues S. of Martinico. It is 32 miles long from N. to S. and contains 225 square miles. The country is hilly, the climate healthy, and the soil generally good, yielding

all the tropical productions. There are 45 plantations devoted to the sugar cultivation, 225 to cotton, and 133 to coffee. The population in 1803 was 16,640, of whom 1,290 were whites, 1660 colored persons and 13,690 slaves. Little Carenage bay on the west side of the island is the best harbor in all the Caribbean islands. It is large and deep, has an excellent bottom, is free from worms, and is perfectly safe even in hurricanes. St. Lucia has often been taken and retaken in the wars between England and France. It was ceded to France in 1763, but early in the late war it fell into the hands of the English and has never since been restored.

3. *St. Vincent* lies 8 leagues S. S. W. of St. Lucia. It is 24 miles long from N. to S. and contains about 84,000 acres or 131 square miles. The country is generally very rugged and mountainous. Of the 84,000 acres in the island about 47,000 are cultivated. The remaining 37,000 are unfit for agriculture. The soil of the good land is a fine mould well fitted for sugar, which is the principal production. The sovereignty of the island is divided between the English and a race of independent negroes called black Caraiibes. The English part is in the S.W. and includes about half of all the land fit for cultivation. The rest belongs to the black Caraiibes who live in the N. E. The population in 1791 consisted of 1450 whites, 11,853 slaves, 500 red Caraiibes, and about 10,000 black Caraiibes. Kingston, the capital of the English part of the island, is built on a bay to which it gives name, on the S. W. coast.

This island was discovered in 1672, and the English soon after made several unsuccessful attempts to settle it. In 1685 a slave ship from Africa with a cargo of negroes was wrecked on Bequia, a little island near the southern coast. From this island they soon went over to St. Vincent, and were made slaves by the Caraiibes. Finding their numbers increase, their masters came to a resolution to kill all the negro male children; on which the blacks rose in a body and defeated their design. The Caraiibes afterwards occupied one half the island, and the blacks the other. By the accession of runaway slaves from Barbadoes, the blacks became very numerous. The French from Martinico, in 1719, attacked the negroes at the request of the Indians, and were very roughly handled. The English met with the same success in 1723. The Caraiibes gradually diminished in number and in 1791 they amounted only to 500. The independent blacks are called black Caraiibes, partly because there was an actual intermixture, but principally because they adopted the Caribbean customs. The island was ceded in 1763 to the English who at first designed to exterminate the blacks, but in 1773 a treaty of friendship was formed between his majesty and the chiefs of the negroes. In 1779 the island was taken by the French assisted by the negroes, but in 1783 was restored.

4. *Barbadoes* lies 28 leagues east of St. Vincent and is the most eastern of all the West India islands. It is 21 miles long from N. to S. and contains 106,470 acres or about 166 square miles.

most of which is under cultivation. The soil in the low lands is black, on the hills of a chalky marl, and near the sea generally sandy. Of this variety of soil the black mould is best suited for the cultivation of the cane, and with the aid of manure has given as great returns of sugar, in favorable seasons, as any in the West Indies, the prime lands of St. Christopher excepted. The population in 1811, according to returns made to parliament, was 81,939, of whom 16,289 were whites, 3,392 free people of color, and 62,258 slaves. An alarming insurrection of the blacks broke out in Barbadoes in 1816, which was suppressed after the loss of many lives. The island has suffered severely from hurricanes. That of October 1780 destroyed 4,326 lives, and property to the amount of £1,320,000. Bridgetown, the capital, is one of the finest cities in the West Indies. It lies on the S. W. coast of the island on the bay of Carlisle, which is large enough to contain 500 ships. The city contains 1200 houses built mostly of brick and about 12,000 inhabitants. It has often been destroyed by fires and hurricanes. The island was first discovered by the Portuguese. In 1605 the English found it uninhabited, took possession of it, and have retained it to the present time.

5. *Grenada* lies 20 leagues S. S. W. of St. Vincent. It is 24 miles long from N. E. to S. W. and contains about 80,000 acres or 109 square miles. The interior is mountainous but no where inaccessible. The soil, on the whole, is in a high degree fertile. Of the 80,000 acres nine tenths are probably susceptible of cultivation. Sugar, cotton and coffee are the principal productions. The population in 1811, according to an official return, was 31,362, of which number 771 were whites, 1210 free people of color, and 29,381 slaves. St. George, the capital, formerly called Fort Royal, lies on a spacious bay in the S. W. part of the island. Its harbor is one of the best in the West Indies, and is defended by a fort. Grenada was settled in 1650 by the French who exterminated the natives. The English took it in 1762 and it was confirmed to them by the peace of 1763. In 1779 it was taken by the French but was restored to Britain at the peace of 1783.

The *Grenadines* are a cluster of small islands dependent on Grenada, and lying between that island and St. Vincent. *Cariacou* the largest contains 10 square miles.

6. *Tobago* lies 30 leagues S. E. of Grenada. It is 30 miles long from N. E. to S. W. and contains 140 square miles. The country is in general undulating but in the N. W. mountainous. Its soil is chiefly a rich black mould well fitted for all the fruits of the climate. The population in 1805 consisted of 900 whites, 700 people of color and 14,823 slaves; in all nearly 16,500 souls. The island lies out of the usual track of the hurricanes, and in this respect has an incalculable advantage over those farther north. Tobago has been alternately in the hands of the English and French several times within the last century, but was confirmed to the former by the treaty of Paris in 1814.

7. *Trinidad* lies opposite the mouth of the Orinoco, near the coast of South America, from which it is separated by the gulf of

Paria. In size it is the largest of the Caribbean islands, being 60 miles long from N. to S. and containing 1700 square miles, or 1,088,000 acres, of which it is estimated that 870,400 are capable of cultivation. Three distinct ridges of mountains cross the island from west to east; the northern, middle and southern. Between them are extensive plains and fertile vallies. Of the 870,400 acres capable of cultivation only a very small part is actually improved. The sugar plantations cover 6,900 acres, the cotton 2,531, coffee 4,886, grain and provisions nearly 10,000. The population in 1803 was 28,477, of which number 2,261 were whites, 5,275 free colored persons, 19,709 slaves and 1,232 Indians. Port Espana, near the N.W. corner of the island, is the principal seaport and contained in 1806 about 3,000 inhabitants. There is a remarkable lake on this island known by the name of Tar lake. It is on the west coast, a little S. of the middle of the island, on a promontory which reaches about 2 miles into the sea. It is of very considerable depth, and yields a substance which on exposure to the heat of the sun has the consistence of pit coal. A gentle heat renders it ductile, and when mixed with a little grease or common pitch, it is much used for graving the bottoms of ships. This island was in the possession of the Spaniards, but was taken by the English in 1797, and ceded to them in 1802.

IV. LESSER ANTILLES.

1. *Margarita*. This island belongs to Caraccas and will be described in our account of that country.

2. *Tortuga*. *Sal Tortuga* or *Tortuga Salada*, is 16 leagues W. from Margarita, and 15 from the Main. It is about 40 miles in circumference, and is chiefly noted for its large salt pond, from which immense quantities of salt are taken annually. Great numbers of turtles also come into the sandy bays to lay their eggs, from which circumstance the island is called Turtle island.

3. *Orchilla* or *Horchilla* lies 20 leagues N. W. of Tortuga and is 24 miles long from N. E. to S. W.

4. *Bonair* or *Bucaire* lies 33 leagues W. N. W. of Orchilla and 21 from the Main. It is about 40 miles long from N. W. to S. E. and is inhabited by Caribbes and negroes, who raise cattle, and cultivate yams, maize and potatoes. It is a dependency of Curacoa.

5. *Curaçoa* is 8 leagues W. of Bonair. It is 60 miles long from S. E. to N. W. and on an average 10 broad. The soil is naturally barren, yet through the industry of the Dutch has been rendered very productive. The island derives its principal importance from its conveniences for the smuggling trade, which is carried on to a great extent with the South American provinces. The island

was taken by the English in 1806 but was restored to the Dutch in 1814.

6. *Aruba* or *Oruba* lies 13 leagues W. of Curacoa. It is 15 miles long, and eight broad. It is considered as a dependency of Curacoa, but is uninhabited.

SOUTH AMERICA.

Situation and Extent.] South America is bounded N. by the Caribbean sea; E. by the Atlantic ocean; S. by Terra del Fuego, from which it is separated by the straits of Magellan; W. by the Pacific Ocean; and on the N.W. it is connected with North America by the isthmus of Darien. It extends from lat. 54° S. to lat. 12° N. and from lon. $34^{\circ} 30'$ to 81° W. Its greatest length from N. to S. is 4570 miles, and its greatest breadth 3,230. The area is estimated at 7,000,000 square miles.

Divisions.] South America is divided into the following countries :

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| 1. New Granada. | 5. Brazil. |
| 2. Caraccas. | 6. Buenos Ayres. |
| 3. Guiana. | 7. Chili. |
| 4. Peru. | 8. Patagonia. |

Mountains.] There are two extensive ranges of mountains, one running along the western and the other along the eastern coast. The Andes or great western range, commencing on the straits of Magellan at the southern extremity of the continent, runs in a northerly direction to the isthmus of Darien, and is generally parallel with the shore of the Pacific ocean, at the distance of from 50 to 200 miles. In different parts of its course it varies greatly in its general aspect. Sometimes the range consists of one entire mass, while at others two or three distinct ridges appear, separated by longitudinal vallies. In Chili the Andes are about 120 miles broad, and consist of a great number of mountains, all of them of prodigious height and appearing to be chained to each other. In Peru they divide into three ridges, which continue till about the 6th degree of S. lat. where they are united into a single chain. They again divide on entering New Granada into two distinct ridges, which inclose between them a longitudinal valley 200 miles long, 20 or 30 broad, and elevated 9,000 feet above the level of the sea. Farther to the north, between the 2d and 3d degrees of N. lat. the Andes divide into three separate ranges; the western is the proper Andes and passes into North America over the isthmus of Darien; the eastern, called the chain of Venezuela, pursues a northeasterly course into Caraccas, and winding along the shores of that province, terminates on the gulf of Paria opposite the island of Trinidad; the middle range runs north, between the rivers Magdalena and Cauca. The most elevated part of the Andes is the double ridge in New Granada, which

abounds with colossal summits. the highest of which rises to more than 20,000 feet above the level of the sea. In Chili, Peru, and New Granada the loftiest peaks form one row of volcanoes, many of which are in a state of constant eruption.

The eastern range of South American mountains, sometimes termed the Brazilian Andes, runs along the coast of Brazil from about 12° to 32° S. lat. It is connected with the great western range by a ridge called by Humboldt the Andes of Chiquitos, which winds its way irregularly across the continent between 10° and 20° S. lat. separating the waters which flow north into the Amazon from those which flow south into the Plata.

Rivers.] Owing to the peculiar construction of South America, no river of any magnitude flows from it into the Pacific ocean, the Andes forming a continued barrier along the whole western coast. For the same reason no important stream enters the Atlantic between 12° and 32° S. lat. More than three fourths of all the water which falls on this continent is carried to the ocean through the channels of the three great rivers, the Orinoco, the Amazon and the Plata.

The *Orinoco* rises in lat. 5° N. and lon. 65° W. Its course is very crooked, somewhat resembling the figure 6. For the first 300 miles it runs from N. to S. It then turns, and proceeds in a westerly direction for several hundred miles, to St. Fernando, where it receives from the S. W. the Guaviari, a very considerable river. Here it turns northward, and after receiving the Vichada from the west, pours its waters down the cataracts of Atures. These cataracts are 740 miles from the mouth of the Orinoco, and 760 from its source, and completely obstruct the navigation. At the distance of 90 miles below the cataracts the river is enlarged by the junction of the Meta, one of its principal tributaries, which is 500 miles long and navigable 370 miles. About 90 miles below the mouth of the Meta, the Orinoco receives from the west the Apura, a large and deep river, 520 miles long, having numerous and wide spreading branches, and more rapid than the Orinoco into which it empties its waters by many mouths. After receiving the Apura it turns, and running about 400 miles in an easterly direction divides into many branches, and discharges its waters into the ocean by 50 mouths, the two most distant of which are 180 miles apart. Only seven, however, are navigable, and but one of them, the southern, called the Ship's Mouth, for vessels of more than 200 tons. All the rivers which rise on the southern declivity of the chain of Venezuela, and on the eastern declivity of the Andes between the parallels of 2° and 9° N. lat. are tributaries of the Orinoco. It thus forms the channel which conveys to the ocean the waters of an immense valley, extending from east to west about 1,000 miles, and from north to south, in many parts between 500 and 600.

The *Amazon*, the largest river in the world, rises in Peru between two ridges of the Andes in about lat. 10° S. under the name of the *Tunguragua*, and after running in a northerly direction through four or five degrees of latitude leaves the moun-

tains, and pursuing a direction a little north of east completely across the continent, discharges its waters under the equator by a mouth 180 miles wide, after a course of more than 4,000 miles. The tide flows up 400 miles, and the river is navigable to the very foot of the Andes.

The principal branches from the south are, 1. The *Ucayale*, which from its size and the length of its course is well entitled to be considered the main stream. It is formed by the junction of two large rivers, the *Apurimac* and the *Beni*, the last of which rises in the Andes near Lake Titicaca between 17° and 18° S. lat. and running towards the north is joined by the *Apurimac*, near latitude 10° S. The united stream, under the name of *Ucayale*, then continues a northerly course of nearly 1,000 miles, and joins the Amazon in $4^{\circ} 25'$ S. lat. 2. The *Madeira*, is the principal tributary of the Amazon. It rises in the Andes in Buenos Ayres between 19° and 20° S. lat. and passes under various names into Brazil, where it is joined by numerous other rivers, and makes its way in a northeasterly direction to the Amazon, into which it falls after a course of more than 2,000 miles. 3. The *Tocantins*, which discharges itself into the Amazon near its mouth, after a northerly course of about 1500 miles. Its principal tributary, the *Araguay*, rises between the parallels of 18° and 19° S. lat. The other principal tributaries of the Amazon from the south are the *Jutay*, the *Juruay*, and the *Puros*, which join it between the *Ucayale* and the *Madeira*; and the *Tapajos* and *Xingu*, which join it between the *Madeira* and the *Tocantins*. The principal rivers which fall into the Amazon on its northern bank, beginning in the west, are the *Napo*, the *Putumayo* or *Ica*, the *Japura* and the *Negro*. The *Negro* is remarkable for sending off a branch towards the north, which under the name of *Cassiquiare* falls into the *Orinoco*, and thus unites the Amazon with that mighty stream. All the rivers which rise on the eastern declivity of the Andes between the parallels of 2° N. lat. and 20° S. lat. are tributaries of the Amazon. Not a single brook rises in all this distance which does not contribute to swell its waters. The valley of the Amazon is thus more than 1500 miles long from north to south; from east to west it is more than 2,000, and its area may be estimated at 3,000,000 square miles, comprehending nearly half of South America.

The *Plata* is a very broad stream, formed by the *Uruguay* and the *Parana*, which unite near lat. 34° S. It is more properly the mouth or estuary of these two rivers, as it is no where less than 30 miles broad, and at its entrance into the ocean between the parallels of 35° and 36° , expands to the width of 150 miles. The *Uruguay*, the eastern branch of the *Plata*, rises on the western declivity of the Andes of Brazil, and pursues a southwesterly course of more than 1,000 miles, for the last 200 of which it is navigable. The *Parana*, or western branch of the *Plata*, is formed by the union of several small streams which rise on the western declivity of the Andes of Brazil, between 18° and 21° S. lat. It runs on the whole in a southwesterly direction for about 1000 miles, till it re-

ceives the Paraguay from the north, when it turns to the south, and after a further course of 500 miles joins the Uruguay. The *Paraguay* is formed by several streams which rise between the parallels of 13° and 14° S. lat. on the southern declivity of the Andes of Chiquitos, near the head waters of the Tapajos, the Xingu, the Tocantins and other tributaries of the Amazon. It runs a southerly course through nearly 14 degrees of latitude, and joins the Parana under the parallel of 27° . The *Pilcomayo* and the *Vermejo*, the principal western branches of the Paraguay, both rise in the Andes between 20° and 23° S. lat. and pursue a southeasterly course of more than 1,000 miles. The *Salado*, the principal western branch of the Parana, rises in a branch of the Andes under 24° S. lat. and after a southeasterly course of 800 miles joins the Parana at Santa Fe. The *Saladillo* is a considerable stream which rises in the interior of Buenos Ayres, and joins the La Plata about 50 miles from its mouth, after a southeasterly course of several hundred miles. The valley of the Plata thus includes the extensive country bounded west by the Andes of Chili, north by the Andes of Chiquitos, and east by the Andes of Brazil, embracing more than two thirds of Buenos Ayres and the southern part of Brazil, and covering an area of about 1,290,000 square miles.

NEW GRANADA.

Situation and Extent.] New Granada is bounded N. by the Caribbean sea; E. by Caraccas, Spanish Guiana and Brazil; S. by Peru; W. by the Pacific ocean, and N. W. by Guatemala, in North America, with which it is connected by the isthmus of Darien. It extends on the coast of the Pacific from lat. 9° N. to $3^{\circ} 25'$ S. and on the coast of the Caribbean sea from $72^{\circ} 30'$ to $82^{\circ} 30'$ W. lon. The area is about 1,400,000 square miles.

Divisions.] New Granada is divided into 24 provinces, which are under the jurisdiction of three audiences, as follows :

I. Audience of Panama.

1. Veragua.

2. Panama.

3. Darien.

II. Audience of Santa Fe.

4. Choco.

5. Zinu.

6. Carthagena.

7. Santa Martha.

8. Merida.

9. San Juan de los Llanos.

10. Santa Fe.

11. Antioquia.

12. Novita.

13. Rapasa.

14. Popayan.

III. Audience of Quito

15. Barbacoa.

16. Pastos.

17. Atacames.

18. Quito.

19. Riobamba.

20. Guayaquil.

21. Macas.

22. Cuenca.

23. Loja.

24. Jaen de Bracamoros.

Bays.] The principal bays on the coast of the Pacific ocean are the gulf of Guayaquil in the south, the bay of Choco in the

middle, and the bay of Panama in the north. On the coast of the Caribbean sea is the gulf of Darien, which is separated from the bay of Panama by the isthmus of Darien.

Mountains.] The Andes come from Peru and proceed along the coast of the Pacific ocean, through the whole extent of this country, from south to north. Soon after passing the southern boundary the range divides into two distinct ridges, which run in a northerly direction, parallel with each other for 200 miles, inclosing between them a longitudinal valley 20 or 30 miles broad, and elevated 9,000 feet above the level of the sea. Between the 2d and 3d degrees of N. lat. the range again divides into three separate chains; the eastern is the chain of Venezuela; the middle, the chain of Santa Martha, and the western, the proper Andes. The chain of Venezuela runs in a northeasterly direction towards the southern extremity of the lake of Maracaybo; where it divides into two branches, one of which proceeds on the west side of the lake, and terminates near Cape de la Vela on the Caribbean sea; the other continues a northeasterly direction and winds along the whole northern coast of Caraccas. The chain of Santa Martha is the loftiest of the three. It forms the dividing ridge between the waters of the Rio Magdalena and those of the Rio Cauca, and often rises beyond the limits of perpetual snow. The western chain separates the waters of the Rio Cauca from those of the Pacific ocean. Its highest elevation is scarcely 5,000 feet, and it sinks so low in its progress northward, that its course can scarcely be traced into the isthmus of Darien.

The loftiest summits of the Andes are immediately south of the equator, in the two ridges in the province of Quito. These ridges rise above the valley included between them like two walls, and are beset with colossal summits exceeding in height all the other mountains of the new world. The loftiest peak is the celebrated Chimborazo, which rises between 1° and 2° S. lat. to the height of 21,440 feet above the level of the sea, and for nearly 5,000 feet from its top is covered with perpetual snow. This vast mountain presents a most magnificent spectacle from the shores of the Pacific ocean, after the long rains of winter, when the air is remarkably transparent. Its enormous circular summit is then seen projected upon the deep azure blue of the equatorial sky, towering with commanding majesty over the whole chain of the Andes. In 1797 it was ascended by Humboldt and M. Bonpland. These enterprizing travellers attained the height of 19,300 feet, the highest spot of earth on which man ever trod. They were prevented from advancing farther by a chasm 500 feet wide; and at the height to which they had already attained, they encountered unusual hardships. The air was intensely cold and piercing, and owing to its extreme tenuity respiration was difficult. The blood oozed from the eyes, the lips, and gums. One of the party fainted, and all of them felt extreme weakness.

Volcanoes.] Volcanoes are very numerous. Of these the most dreadful on account of the frequency and violence of its eruptions is Cotopaxi, which rises, at the distance of 40 miles S. E. of the

city of Quito, to the height of 18,898 feet above the level of the sea. It is the most beautiful of the colossal summits of the Andes, being a perfect cone, covered with an enormous layer of snow, and shining at sunset with dazzling splendor. The most remarkable eruptions took place in the years 1698, 1738, 1742, 1744, 1766, 1768 and in 1803. In some of these the flames have risen nearly 3,000 feet above the brink of the crater, cities and towns have been overwhelmed, and the roarings of the volcano have been heard at the distance of 600 miles. The explosion in January 1803 was preceded by the dreadful phenomenon of the sudden melting of the snow around the mountain. For 20 years before no smoke or vapor, that could be perceived, had issued from the crater; and in a single night the subterraneous fire became so active, that at day-break the external walls of the cone, heated by the action of the flames, appeared naked. The melted snow descended in an impetuous torrent on the neighboring plains, sweeping down every obstacle, and involving in destruction all that was exposed to its fury. Humboldt, who was at this time at the port of Guayaquil, 150 miles distant, mentions, that day and night, so long as the eruption lasted, the roar of the volcano was heard like the continued discharge of cannon.

Rivers.] All the rivers which rise east of the Andes are tributaries of the Orinoco and the Amazon; those which rise west of the Andes fall into the Pacific Ocean; and those between the eastern and western branches flow north into the Caribbean sea.

The *Magdalena* is the great river of New Granada. It rises near Popayan, between the parallels of 1° and 2° N. lat. and pursuing a northerly course between the eastern and middle branches of the Andes, falls into the Caribbean sea, after a course of 1,000 miles, for 600 of which it is navigable. The *Cauca* rises also near Popayan, and pursuing a northerly course of about 500 miles between the middle and western branches of the Andes, falls into the Magdalena. The *Atrato* is a considerable river, which falls into the gulf of Darien, after a northerly course of 2 or 3 hundred miles. The *Guayaquil*, which falls into the gulf of the same name, is navigable for 120 miles. The *Tumbez*, a small river which falls into the gulf of Guayaquil in $3^{\circ} 25'$ S. lat. forms part of the boundary between New Granada and Peru.

The principal rivers which fall into the Orinoco are the *Meta*, the *Pichamp*, and the *Guaviari*, all of which rise on the east side of the chain of Venezuela, and pursue an easterly course for several hundred miles. The *Meta* is 500 miles long and is navigable for 370 miles. The principal tributaries of the Amazon are the *Napo*, the *Putumayo* or *Ica*, the *Yapura* and the *Negro*, all of which rise east of the Andes and pursue a southeasterly course.

Face of the country.] The country inclosed between the ridges of the Andes consists of elevated plains, as we have already mentioned. On the east of the Andes there are low plains extending on a dead level for hundreds of miles towards the Orinoco.

and the Amazon, and watered by the tributaries of those rivers. On the coasts the land is low, in some places marshy, and in others sandy.

Climate.] The climate varies according to the elevation. On the coasts and in the low country it is excessively hot and unhealthy. The elevated plains between the double ridge of the Andes, although directly under the equator, in the centre of the torrid zone, enjoy a temperate and steady climate; and it is chiefly in these delightful spots that the European colonists have fixed their abode.

Soil and Productions.] The soil of this country is fertile in all the richest productions of the temperate and torrid zones. The low plains produce in abundance sugar cane, coffee, cacao, cotton, tobacco, beautiful timber for ship-building, valuable dye-woods, and medicinal plants of various kinds. Flowers and fruits are also found in inexhaustible variety. Maize, wheat, and all the European plants and vegetables are cultivated by the Spaniards on the high plains, as successfully as in New Spain.

Animals.] The animals of this country are various and abundant. In the mountains are found stags, bears, rabbits and mountain cats; while the sultry plains and forests produce tigers or jaguars, which are extremely fierce; lions, though of a small size, besides leopards, tiger-cats, monkeys, &c. There are also scorpions, alligators, vipers, and snakes, some of which are of enormous size and much dreaded for their courage and agility. The condor is the largest bird, and is frequently known to seize and fly away with lambs. Cattle have multiplied to such an extent in the low and extensive plains as to be troublesome from their numbers.

Minerals.] This kingdom is extremely rich in minerals, particularly in gold, the amount of which for the year 1301 was £507,000. The silver procured here is also remarkably pure. Platina, that valuable mineral, was for a long time thought to be peculiar to this country. Lead and copper are also found, though little sought after: emeralds and other precious stones are sent to Europe, and salt is obtained in great quantity.

Chief towns.] *Santa Fe de Bogota*, the capital, is on the small river Bogota, a tributary of the Magdalena. It is handsomely built, on a spacious fertile plain, elevated more than 3,000 feet above the level of the sea, and contains about 30,000 inhabitants.

Quito is situated in the Andes, almost under the equator, at the distance of about 100 miles from the coast of the Pacific Ocean. It is built on the side of the volcanic mountain of Pichincha, at an elevation of 9,510 feet above the level of the sea. Owing to the elevation, the temperature is here mild and delightful throughout the year; but there are frequently dreadful tempests of thunder and lightning, and more dreadful earthquakes. In 1797 an earthquake suddenly changed the face of the whole district in which the city is situated, and in the space of a second, forty thousand persons were hurled into eternity. The city contains 7 churches,

a university and numerous convents. The population is about 70,000; of which number the whites constitute one sixth part, the Indians another sixth, and the remainder is composed of mestizoes and casts of different kinds.

Popayan is situated in the Andes under lat $2^{\circ} 28'$ N. about 200 miles N. E. of Quito, on an extensive plain, elevated 5,905 feet above the level of the sea, and in the immediate vicinity of the great volcanoes of Purace and Sotora. It is the seat of the royal mint, the annual coinage of which is estimated at a million dollars. The population is computed at 25,000, of whom one third part are negroes; one sixth part, Indians; and the remainder whites, mestizoes and mulattoes.

The principal sea ports on the coast of the Caribbean sea are Carthagena and Porto Bello. *Carthagena* is in lat. $10^{\circ} 30'$ N. on a sandy island, artificially connected at the west end with the main land. The harbor is spacious, defended from every wind, with a sufficient depth of water, and good anchorage, but the entrance is very narrow. The climate is excessively hot and unhealthy, but the advantageous situation of the town has, notwithstanding, made it a place of extensive trade. Its wealth and importance has caused it to be frequently pillaged by the English and French, and during the contest which is now carrying on between Spain and her colonies, it has frequently been taken and retaken by the contending parties. The population is estimated at 24,000. *Porto Bello* is on the north coast of the isthmus of Darien, in lon. $79^{\circ} 26'$ W. It has an excellent harbor, but the situation of the town is unhealthy, being surrounded by mountains which prevent the free circulation of the air. The population is inconsiderable, and consists chiefly of negroes and mulattoes.

The principal ports on the Pacific are Panama and Guayaquil. *Panama* is on the south side of the isthmus of Darien, 65 miles south of Porto Bello, at the bottom of the bay of Panama. It was formerly a place of great trade. *Guayaquil* is on the west bank of the river of the same name, about 20 miles from its mouth. The river is navigable to the town for vessels of any size, and affords an excellent harbor.

Canals.] Various plans have been proposed for connecting the two oceans by canals. The small river Chagre, which falls into the Caribbean sea a little west of Porto Bello, is navigable to Cruces, 5 leagues from Panama. The elevation of the country between Cruces and Panama has never been accurately ascertained, but it is supposed would afford no obstacle to a canal for boats, though it would be wholly impossible to construct one for large vessels. A branch of the Rio Atrato, which falls into the gulf of Darien, approaches within five or six leagues of the Pacific Ocean, and the intervening country is quite level and proper for a canal. Another branch of the Rio Atrato approaches so near to a small river which falls into the Pacific, that a small canal has been actually dug between them, by means of which, when the rains are abundant, canoes loaded with cacao pass from sea to sea.

Population and Religion.] The population has never been accurately ascertained, but is computed at 1,800,000. It is composed of Spaniards, Creoles, Indians, mestizoes and negroes. Of these the Indians are the most numerous. The religion is Roman Catholic, as in all the Spanish colonies.

Government.] New Granada, a few years since, was a Spanish colony under the dominion of a viceroy, whose residence was at Santa Fe de Bogota. In 1811, however, a Congress, assembled at Carthagena, declared the country independent. The royal troops afterwards succeeded in re-establishing the authority of the mother country; but the revolutionists have recently again thrown off the yoke, and this country is now united with Caraccas under the title of the Republic of Columbia. The independence of the new republic has never yet been acknowledged by any civilized nation.

Natural Curiosity.] The *Cataract of Tequendama*, in the river Bogota, near Santa Fe, is a natural curiosity. This river, after watering the elevated plain on which that city stands, breaks through the mountains, and with two bounds rushes down a precipice to the astonishing depth of 570 feet. The column of vapor, which rises like a cloud from the shock, is seen from the walks around Santa Fe, 15 miles distant, reflecting the colors of the rainbow in ever varying beauty.

CARACCAS.

Boundaries and Extent.] Caraccas, including Spanish Guiana, is bounded N. by the Caribbean sea; N. E. by the Atlantic Ocean; E. by English Guiana; S. by Portuguese Guiana, and W. by New Granada. It extends on the coast from the mouth of the Esequibo, in 6°40' N. lat. to Cape de la Vela in lat. 12° N. In the interior it extends as far south as the equator. The number of square miles, according to Hassel, is 511,324.

Divisions.] In 1804 there were five provinces, which are given in the following table, with the population according to the estimate of Depons:

<i>Provinces.</i>	<i>Population.</i>	<i>Chief Towns.</i>
Venezuela, (including Varinas,)	500,000	Caraccas.
Maracaibo,	100,000	Maracaibo.
Cumana,	80,000	Cumana.
Spanish Guiana,	34,000	St. Thomas.
Margarita island,	14,000	Assumption.
Total,	728,000	

Bays.] The *Gulf of Maracaibo* in the N.W. is inclosed between two peninsulas, and communicates with the Caribbean sea by a mouth 40 miles wide. The *Gulf of Cariaco* is formed by a long narrow peninsula which projects from the main land to the south of the island of Margarita. The *Gulf of Paria*, formed by the

main land on the west, and the island of Trinidad on the east, is 25 leagues long by 15 broad, and every where affords anchorage and protection for the largest vessels. It receives the waters from several of the mouths of the Orinoco, and communicates with the ocean by two outlets, one at the N. W. point of the island of Trinidad, and the other at the S. W. point of the same island.

Face of the country.] The northern part of the country is mountainous, being occupied by the chain of Venezuela, a branch of the Andes which comes from New Granada, and after proceeding for some distance in a northeasterly direction, at last turns to the east, and runs along the coast, continually diminishing in height till it terminates on the gulf of Paria, opposite the island of Trinidad. The whole country south of the mountains consists of immense plains, which stretch out for hundreds of miles in length and width, comprehending nearly the whole country watered by the Orinoco and its branches. The district along the banks of the Orinoco in the lower part of its course, extending 200 leagues from its mouth, and in some places 30 leagues broad, is annually overflowed in the rainy season, and nothing is then discoverable but here and there a hillock, and the tops of the tallest trees.

Lakes.] Lake *Maracaibo* in the N.W. is 200 miles long and 70 broad, and communicates with the gulf of Maracaibo through a narrow strait, which is well defended by strong forts. It is easily navigated by vessels of the greatest burden. A large lake, called lake *Purima*, is frequently laid down on the maps a little to the east of the sources of the Orinoco, but its dimensions and even its existence have never been ascertained.

Rivers.] The numerous small rivers which rise on the northern declivity of the chain of Venezuela fall directly into the Caribbean sea, and are generally navigable only for a few miles. All the rivers which rise on the southern declivity of the same chain are tributaries of the Orinoco, except the *Guarapiche*, which falls into the gulf of Paria.

The *Orinoco*, the great river of this country, has already been described. Its principal tributaries are 1. the *Caroni*, a large river from the south, the navigation of which is obstructed by falls one league from its mouth; 2. the *Apura*, which rises on the borders of New Granada, to the south of Lake Maracaibo, and after pursuing an easterly course for 170 leagues, during which it receives from the north numerous navigable and wide spreading branches, discharges itself impetuously into the Orinoco through many mouths; 3. the *Meta*, which rises in New Granada, on the eastern declivity of the mountains, not far from Santa Fe de Bogota, and flowing N. E. joins the Orinoco 50 leagues below the conflux of Atures.

Climate.] The towns on the coast, which enjoy a regular land and sea breeze, and those near and on the mountains have a milder climate than would be expected from their tropical situation. The temperature of the city of Caraccas is delightful

throughout the year. The rainy season lasts from April to November, and during this period all the rivers are in a state of inundation, and the low plains become temporary lakes.

Soil and Productions.] No country in America can be compared with Caraccas in the fertility of its soil, and the variety and richness of its productions. All sorts of colonial produce are raised here in greater abundance than in any of the West Indies, and of a far superior quality. The cacao of Caraccas brings a price in commerce twice as great as that of the Antilles; the indigo is inferior to none but that of Guatemala; the tobacco is said to be worth as much again as the best which Virginia or Maryland affords; the coffee would rival that of Mocha if the same care were used in its preparation. Besides these articles, cotton and the sugar cane are successfully cultivated; the forests yield dye-woods, gums, rosins, medicinal plants, and beautiful timber for the cabinet maker and shipwright. The plains to the south of the mountains are covered with immense herds of mules, oxen and horses. The pearl fishery was formerly carried on in the straits between the island of Margarita and the main, but it is now abandoned, the bank having been exhausted.

Chief Towns.] Caraccas, the capital, is situated among the mountains near the northern coast, in a valley elevated 2,900 feet above the level of the sea. It is regularly laid out, and contains a university, and several churches, hospitals and monasteries. The population in 1802 was estimated at 42,000, of whom one fourth were whites, and the rest negroes, Indians and mulattoes. In consequence of its elevation the city enjoys a delightful temperature throughout the year, but this advantage is counterbalanced by its exposure to earthquakes, one of which, in March 1812, destroyed many houses and buried 12,000 persons in the ruins.

La Guayra, the port of Caraccas, is on the coast, 7 miles north of the city, in an unhealthy situation, being surrounded by lofty mountains which exclude the breeze. The harbor, though more frequented than any other on the coast, is open to the wind and continually agitated by the surge of the sea, which renders loading and unloading extremely inconvenient, and sometimes impossible. It is regarded merely as a shipping place for the capital, and is well defended with forts and batteries. The population is 6,000, of whom two thirds are in the garrison and the gunboats. The road to Caraccas passes over a lofty mountain, on the summit of which are two forts.

Porto Cabello, situated on a peninsula 30 leagues west of Caraccas, is the commercial emporium of a considerable district. Its harbor is one of the best in America, being deep, spacious, completely protected from the surge of the sea and from every wind, and well defended by several forts. The inhabitants, 7,500 in number, are principally employed in commerce and navigation, and have been heretofore extensively engaged in the contraband trade with Curacoa and Jamaica.

Valencia is delightfully situated in a beautiful and fertile plain near the western bank of a lake of the same name, about six

leagues south of Porto Cabello. All the produce from the interior, which is shipped at Porto Cabello, passes through this town. The population is 8,000.

Maracaibo is on the western bank of the lake of the same name, near its outlet. The harbor has a bar at its mouth, over which vessels drawing more than 12 feet of water cannot pass. The population is 25,000, more than half of whom are whites.

Cumana is situated near the mouth of the gulf of Cariaco, on an arid and sandy plain, about a mile from the sea. The houses are low and lightly built on account of the frequent earthquakes, one of which, in 1797, destroyed four fifths of the city. The inhabitants, 18,000 in number, are principally engaged in commerce, navigation and the fisheries. *Barcelona*, 10 leagues west of Cumana, on the small river Neveri, about 3 miles from its mouth, is surrounded by extensive plains which abound with horned cattle. The population is 14,000, half of whom are whites.

St. Thomas, the chief town in Spanish Guiana, and capital of the new republic of Columbia, is regularly laid out on the south bank of the Orinoco, 90 leagues from its mouth, and contains 7,000 inhabitants.

Inland Navigation.] By means of the Orinoco and its tributary streams, all the country south of the mountains enjoys an easy communication with the sea. This river forms a natural channel for the conveyance to the ocean, of the cattle and produce raised on the banks of the Apura and its wide spreading branches. By means of the Meta also, a navigable communication is opened into New Granada, almost to the very foot of the Andes. The flour, and other productions of an extensive district near Santa Fe de Bogota, are conveyed to market by the Orinoco in preference to the Magdalena. The navigation of the Orinoco is somewhat difficult on account of the islands and rocks with which it abounds, but there is no insurmountable obstacle till you arrive at the cataracts of Atures, 20 leagues above the mouth of the Meta.

Population.] The population in 1801, according to the estimate of Depons, was 728,000, of whom about 136,000 were whites, 218,000 negro slaves, 291,000 freed men, and the remainder Indians. In 1822 the whole population may be estimated at more than 1,000,000, without including the tribes of independent Indians.

Indians.] Most of the Indian tribes in this country have been brought into subjection to the Spaniards, and have become partially civilized by the labors of the Catholic missionaries. They are allowed to live in villages by themselves, and to be governed by magistrates of their own choice. The principal Indians remaining unsubdued are the *Goahiros*, who occupy a tract along the coast to the west of the Gulf of Maracaibo, extending for more than 30 leagues. They are about 30,000 in number, and often make inroads into the neighboring settlements. They trade with the English of Jamaica, from whom they receive arms and clothing. The *Guaranos*, who inhabit the islands formed by the mouths of the Orinoco, are about 8,000 in number. Their inde-

pendence is secured by the nature of their country, which during one part of the year is inundated, and in the other so infested with insects as to be uninhabitable to all except the natives. The *Caribs* occupy the coast of Spanish Guiana, between the mouths of the Essequibo and the Orinoco. They have been troublesome neighbors to the Spaniards, but it is supposed might be subdued without much difficulty. Besides these tribes, all the country on the Orinoco above the cataracts of Atures, and indeed all the immense tract between the sources of the Orinoco and those of the Amazon, are inhabited by nations of savages, who have hitherto resisted all the efforts of the Spaniards to civilize or subdue them.

Religion.] The religion is Roman Catholic, and the number of priests was formerly excessively numerous, but of late years military distinctions, and the honors and emoluments of civil life have drawn away great numbers of the young men from the clerical office. The donation of lands and other property to convents and churches, was formerly carried to such an extent as very seriously to affect the prosperity of the country, and the government was obliged to interfere and prohibit it.

Government.] Previous to the late revolution Caraccas was a colony of Spain, and the government was entrusted to a captain-general, who resided at Caraccas. In 1811 the inhabitants revolted from the Spanish yoke, and declared themselves independent. The mother country, however, afterwards succeeded in establishing her authority, but the revolutionists have recently again expelled the royal troops, and Caraccas is now united with New Granada under one government, and the whole country is styled the Republic of Columbia. Its independence, however, has not yet been acknowledged by any civilized nation.

Education.] Under the old government the system of education was wretched in the extreme. Scarcely any provision was made for the establishment of schools, and those which were established were conducted on the narrowest principles. So late as the year 1803 there was no printing press in the whole country. Within a few years new modes of thinking and more liberal principles have prevailed. Works in foreign languages, particularly the French and English, are now imported and read with great avidity.

Commerce] The principal exports are cacao, indigo, tobacco, coffee and cattle. The imports are manufactured goods of almost every description. The contraband trade is carried on to such an extent by the foreign colonies in the neighborhood, that it is impossible, from the custom-house returns, to form any estimate of the real value of the imports or exports. The Dutch in Curacao have been engaged in this trade for nearly two centuries, and the English have recently prosecuted it very extensively from Trinidad, Jamaica, and Guiana; and such are the facilities afforded by the vicinity of these colonies, by the long extent of coast, and by the navigation of the Orinoco, that the government find it wholly impossible to suppress it.

Island.] The island of Margarita lies off the northern coast, in lat. 11° N. and lon. 64° W. and is separated from the continent by a strait eight leagues wide. It contains 350 square miles. The soil is sandy and unfit for cultivation. The population is estimated at 14,000, of which number 5,500 are whites, 2,000 Indians, and 6,500 slaves and free people of color. Assumption, the capital, stands near the centre of the island. The principal port is Pampatar, on the S. E. side of the island, and it is here that all the fortifications are erected, which are deemed necessary for the defence of the island.

GUIANA.

Situation and Boundaries.] Guiana is a large tract of country, extending on the coast from the mouths of the Orinoco to the mouth of the Amazon, a distance of 1,100 miles. It is bounded N. by Caraccas, from which it is separated by the river Orinoco; E. by the Atlantic Ocean; S. by Brazil, from which it is separated by the rivers Amazon and Negro; and W. by New Granada, from which it is separated by the rivers Cassiquiari and Orinoco. As the Negro and Orinoco unite by means of the Cassiquiari, this whole tract is a real island, entirely separated by water from the rest of the continent.

Face of the country.] The coast of Guiana is rendered almost inaccessible by dangerous banks, rocks, quicksands and bogs, with prodigious bushes so closely interwoven as to be impenetrable. Along the sea shore, and for a considerable way into the interior, the country presents an extensive and uniform plain, of unequalled fertility. It is covered with thick forests, even to the water's edge, and the coast is so low and flat, that nothing is seen at first but the trees, which appear to be growing out of the water. As you advance into the interior, towards the sources of the rivers, the country rises into mountains, covered with immense forests, and interspersed with rich and fertile vallies.

Climate.] The climate is milder than that of any tropical country inhabited by Europeans. Though situated in the torrid zone, the heats are tempered by cooling breezes, which regularly blow from the sea, from 10 o'clock in the morning to six in the evening. The nights are damp and foggy. The year is divided into two dry and two wet seasons. The long rainy season commences about the middle of April, and continues till the first of August, and is succeeded by the long dry season, which lasts till the middle of November. The second wet season begins about the middle of November, and continues till the end of January; the short dry season then commences, and continues till the middle of April; and thus is completed the revolution of the year. The range of the thermometer on the sea coast, during the dry season, which is reckoned the hottest, is from 84° to 90° , but in general

it is confined between 73 and 84. In the interior it seldom rises above 80, and during the night frequently falls as low as 50 or 60.

Rivers.] All the rivers west of the mountains are tributaries of the Orinoco and the Amazon. They traverse an uncultivated country, the greater part of which has never yet been explored. The principal rivers which fall directly into the Atlantic, beginning in the north, are the *Essequibo*, the *Demerara*, the *Berbice*, the *Corantine*, the *Surinam*, the *Maroni*, or *Marawina*, the *Oyapok* and the *Aruary*. All these rise in the mountains, and are generally navigable for some distance into the interior.

Soil and Productions.] The soil is surprisingly fertile, and overspread with the most luxuriant vegetation, abounding in the finest woods, in all the tropical fruits, and in an infinite variety of both rare and useful plants. The low country, during the rainy season, owing to its extreme flatness, is usually covered with water to the depth of two feet, which so enriches the soil, that in some places 30 crops of rice may be raised in succession, while in the West India islands the richest lands never yield more than two successive crops. Cultivation is as yet confined to the immediate vicinity of the coast, and the banks of the navigable rivers which fall directly into the Atlantic, all of which are lined with plantations of coffee, sugar, cacao, cotton and indigo.

Animals.] Guiana abounds in a variety of wild animals and beasts of prey. Of the latter, the most powerful and ferocious is the jaguar, which grows to a large size, and frequently attacks horses and cows. Many of the domestic animals of Europe, such as the ox, the hog, the sheep, &c. have been imported from the old continent, but they do not appear to thrive. The oxen and sheep have degenerated in size and quality. Owing to the heat and moisture of the climate, insects and reptiles are produced in great abundance, and are excessively troublesome to the inhabitants.

Divisions.] The coast of Guiana is divided between five different European nations, as follows :

1. *Spanish Guiana*, extending from the mouths of the Orinoco to the mouth of the Essequibo. It forms one of the provinces of the captain-generalship of Caraccas.

2. *English Guiana*, extending from the Essequibo to the Corantine, and embracing the three districts of Essequibo, Demerara and Berbice, each of which extends along the banks of the river of the same name.

3. *Dutch Guiana* or *Surinam*, extending from the Corantine to the Marawina. It formerly extended west to the Essequibo, but during the late war in Europe, the British took possession of all that is now included in English Guiana, and this part was ceded to them by the treaty of Paris in 1814.

4. *French Guiana*, which formerly extended from the Marawina to the Aruary, but at the Congress of Vienna, in 1815, the Oyapok was made the boundary.

5. *Portuguese Guiana*, which occupies the rest of the coast from Oyapok to the Amazon.

The whole western part of the country, extending as far south as the equator, is considered as belonging to Spanish Guiana. The boundaries, however, between the different divisions, in the interior, are not accurately determined, and there is no necessity for determining them at present, because the white settlements do not extend far from the sea coast, the interior being occupied by warlike Indians.

Chief Towns.] *Georgetown*, formerly *Stabroek*, the capital of the district of Demerara, in English Guiana, is on the east bank of Demerara river, about a mile from its mouth. The town is built on a flat strand, very little elevated above the level of the water. The houses are of wood, seldom above two stories high, and stand on low brick foundations. The population is estimated at 8,500, of which number 1,500 are whites, 2,000 free people of color, and 5,000 negroes.

New Amsterdam, the capital of the district of Berbice, in English Guiana, is on the river Berbice, about a mile from its mouth, at the point where it is joined by the river Canje. The town is intersected by canals, which are filled and emptied at every tide, by which means all the filth is carried away before it has time to stagnate and render the air unhealthy.

Paramaribo, the capital of Surinam or Dutch Guiana, is on Surinam river about 18 miles from its mouth. It is handsomely laid out, all the streets being perfectly straight, and lined with orange, tamarind and lemon trees. The trade of the town is very flourishing. The population is estimated at 20,000, of whom 2,000 are Dutchmen, 3,000 Jews, 4,000 free people of color and 11,000 slaves.

Cayenne, the capital of French Guiana, is on the north point of an island of the same name, at the mouth of the river Cayenne. It has a large and convenient port defended by a castle, and contains 1500 inhabitants.

Population.] Spanish Guiana contains 34,000 inhabitants, of whom 20,000 are civilized Indians. Portuguese Guiana is considered as a part of Brazil. The population of the three remaining divisions is given in the following table.

	<i>Whites.</i>	<i>Free blacks.</i>	<i>Slaves.</i>	<i>Total.</i>
English Guiana,	4,160	5,380	102,201	111,741
Dutch Guiana,	5,000	5,000	51,937	62,000
French Guiana,	1,307	394	10,748	12,449

Indians.] The principal tribes of Indians in the neighborhood of the colonists are, the *Caribs*, who inhabit the coast between the Essequibo and the Orinoco; the *Worrows*, who live also on the coast, between the Demerara and the Surinam; the *Arrowaks*, who live behind the Worrows at the distance of 20 or 30 leagues from the sea; and the *Accawaws*, who inhabit the country around the sources of the Essequibo, the Demerara and the Berbice. Besides these, there are numerous tribes farther in the interior, who are but little known.

Runaway negroes.] From the earliest times the Dutch colonies have been exposed to depredations from runaway ne-

groes, who at different periods have been driven by the excessive cruelty of their masters, to take refuge in the woods. Their number had so greatly increased in 1728, that several detachments of soldiers were sent against them without success, and the colonists found themselves compelled to conclude a treaty of peace with them. In 1772 a rebellion broke out in the colony, and great numbers of the slaves joined their comrades in the woods. In this extremity it was resolved, instead of employing white soldiers, who generally fell a prey to the climate, to arm the free negroes. These troops, in connection with a few whites, pursued the revolted negroes into the woods, dislodged them from their strong holds, and so far reduced them, that the colony is now tolerably secure, though still exposed to occasional irruptions.

PERU.

Situation and Extent.] Peru is bounded N. by New Granada; E by Brazil; S by Buenos Ayres, and the desert of Atacama which separates it from Chili; and W. by the Pacific Ocean. It extends on the coast from the river Tumbez, in lat. $3^{\circ} 25' S.$ to the port de Loa, in lat. $21^{\circ} 30' S.$ The area is estimated at 1,000,000 square miles.

Divisions.] Peru is divided into seven intendancies, which are subdivided into 51 districts. The following is a list of the intendancies, each of which derives its name from its principal town.

<i>Intendancies.</i>	<i>Whites.</i>	<i>Indians.</i>	<i>Mestizoes.</i>	<i>Mulattoes.</i>	<i>Slaves.</i>	<i>Total.</i>
Lima,	22,370	63,180	13,747	17,864	29,763	149,112
Cuzco,	31,828	159,105	23,104	993	283	216,382
Arequipa,	39,357	66,609	17,797	7,003	5,258	136,801
Truxillo,	19,098	115,647	76,949	13,757	4,725	230,967
Guamanga,	5,378	75,284	29,621	943	30	111,559
Guancavelica,	2,341	23,899	4,537		41	30,917
Tarma,	15,939	105,187	78,682	844	236	201,259

Total, 136,311 608,911 244,437 41,404 40,336 1,076,997

Face of the country.] The Andes pass through Peru, from S. E. to N. W. parallel with the coast. Soon after crossing the southern boundary they divide into three principal ridges or cordilleras, which continue till about the sixth degree of S. lat. where they are again united into a single chain. Along the whole coast is a narrow plain, from 35 to 70 miles wide, called the country of Valles, consisting of a succession of barren sandy deserts. Immediately east of this is the lower or western ridge of the Andes, reaching the whole length of Peru; not in one unbroken elevation, like the cordillera of Mexico, but composed of successive summits of immense height, between which the eastern inhabitants find a laborious passage to the country of Valles. Between the western and central ridges of the Andes there is a series of plains, varying in width from 100 to 170 miles, elevated generally

8,000 or 10,000 feet above the level of the ocean, and separated from each other by deep vallies. The central cordillera consists also of separate summits, but is less broken than the western, and has an average height of 15,000 feet. The valley included between the central and eastern cordilleras is watered by the river Tunguragua. Beyond the eastern cordillera there are immense unexplored plains, which reach into Brazil, and are traversed from south to north by several of the principal tributaries of the Amazon.

Climate.] In the country of Valles, included between the western cordillera and the coast, rain, thunder and lightning are entirely unknown. During the winter, however, which lasts from July to November, the ground is almost constantly covered with a thick fog, which towards the close of the day generally dissolves into a very small mist or dew, and moistens the earth equably. During the summer the sun's rays occasion an intense heat throughout all this region; the more so as they are received upon a sandy soil, whence they are strongly reflected. This low region is far from being healthy. Malignant, intermittent and catarrhal fevers, pleurisies and constipations are the most common diseases, and rage constantly at Lima. The elevated plains between the western and central cordilleras, called by Humboldt the high table land of Peru, has scarcely any variation of temperature throughout the year; the mercury of Fahrenheit's thermometer always standing at about 65° or 66°. The climate is here mild and genial. The only distinction of seasons arises from the rains, which prevail from November to May. The highest Andes are perpetually covered with snow, and experience an uninterrupted winter between the tropics. Here are also many volcanoes which are flaming within, while their summits, chasms, and apertures, are involved in ice.

Soil and Productions.] The country of Valles has a sandy soil, and owing to the want of moisture, is principally destitute of vegetation. The only spots capable of cultivation are the banks of the small rivers, or such as are within the reach of artificial irrigation. The elevated plains between the Andes are perpetually verdant, and the grains, the vegetables and fine fruits of Europe, flourish here amidst those of the torrid zone. Wine, oil and sugar are the most valuable productions of the coast; and corn, wheat, Peruvian bark, and cacao, of the high country.

Mines.] The mountainous districts abound in metallic wealth. In 1791 the number of gold mines and washings worked in Peru was 69, the number of silver mines 784, of quicksilver 4, of copper 4, and of lead 12. The annual produce of the whole is valued at 4,500,000 dollars, of which the silver constitutes seven eighths. These rich mines, however, are under miserable management. There is in every department not only the greatest ignorance of the art of mining, and of the best methods of extracting the metal from the ore, but, in those which are worked for the government, the most shameful and glaring corruption.

Rivers.] There are no rivers of any importance on the western side of the Andes, all the streams which rise there having but a short course from their sources to the Ocean. On the east of the Andes are the Amazon, and several of its tributaries, the principal of which, beginning in the west, are the *Guallaga*, which rises in lat. $10^{\circ} 57'$ S. and pursues a northerly course of 500 miles; the *Ucayale*, which is formed by the junction of the *Apurimac* and the *Beni*; the *Jutay*, the *Jurway* and the *Puros*, all of which are said to take their rise from the small lake Roguaguado, in lat. 13° S. but very little is known respecting them, as they traverse an unexplored country.

Chief towns.] Lima is situated about 2 leagues from the coast, in lat. 12° S. in the centre of a delightful valley watered by the small river Rimac, which flows along the north side of the city. It is surrounded with a brick wall, which was erected merely as a defence against the sudden attacks of the Indians. The houses are generally handsome, though low and constructed of wood on account of the frequent earthquakes. The principal square in the middle of the city is of great extent and beauty, and contains in the centre a large and magnificent fountain. On its sides are the cathedral and the archbishop's palace, the viceroy's palace, the town-house, and prison. The other principal buildings are the churches and chapels, which are partly built of stone, and decorated in the most splendid style with paintings, and ornaments of gold, silver and diamonds of the greatest value. The convents also are extremely numerous, and there are several colleges and 10 or 12 hospitals. The population, in 1790, was 52,627, of which number 17,215 were whites, 8,960 negroes, 3,912 Indians, and the remainder mulattoes, mestizoes, &c. Of the whites about 3,000 were monks and nuns. Luxury in dress, and fondness for show and splendor prevail to an extravagant degree among the inhabitants of Lima. The public walks and malls are always crowded with carriages, and the richest stuffs of Europe are worn by the lower classes as ordinary dresses.

Callao, the port of Lima, is two leagues distant, on a low flat point of land, near the mouth of a small river of the same name. The port is one of the most safe and commodious on the coast of the Pacific ocean, and is defended by numerous batteries. It is the rendezvous of about 17,000 tons of shipping, employed in commerce with the other provinces of South America, and with Europe. The houses are generally built of slight materials on account of the frequent earthquakes, the most remarkable of which happened in 1746, when three fourths of Lima was laid in ruins, and Callao was entirely demolished, only 200 of the inhabitants escaping the general destruction. The population is about 5,000.

Cusco, the ancient capital of the Peruvians, is 550 miles E. S. E. of Lima. It was founded in the eleventh century by Manco Capac, the first Inca of Peru, and was taken possession of by the Spaniards under Pizarro in 1534. The Spaniards were struck with astonishment at the grandeur and magnificence of the edifices,

particularly of the temple of the Sun, the walls of which were incrustated with gold and silver, and adorned with the idols of the various nations subdued by the Incas. The city still preserves many monuments of its ancient grandeur, and among others the great fortress built for its defence. The population is 32,000, of whom 16,000 are whites, 14,000 Indians, and the rest of mixed blood.

Arequipa, 217 leagues S. E. of Lima, is on the banks of a small river, 20 leagues from the coast. It is one of the largest towns in Peru, containing 24,000 inhabitants. *Truxillo*, in 8° S. lat. about half a league from the sea, contains 6,000 inhabitants. *Guamanga*, 190 miles S. E. of Lima, is an Indian town, containing 25,970 souls, of whom only 169 are whites. *Tarma*, 85 miles E. of Lima, contains 5,538 souls, of whom only 361 are whites, and the rest principally Indians and mestizoes. *Guanacavelica*, celebrated for its mine of quicksilver, and for the gold and silver mines in its vicinity, is 140 miles S. E. of Lima, and contains 5,156 inhabitants, of whom 560 are whites, and the rest Indians and mestizoes.

Population.] According to a census taken in 1795, the seven intendancies of Peru contain 1,076,997 inhabitants. Of this number 136,311 are whites, 608,911 Indians, 244,437 mestizoes, 41,404 mulattoes, and 40,336 slaves. This population is concentrated in the western part of the country, in the country of Valles and along the ridges of the Andes, seldom extending many hundred miles from the coast. The independent Indians, who are not included in the census, and whose number is unknown, occupy all the plains to the east of the mountains.

Inland communication.] From the nature of the country, Peru labors under great disadvantages in regard to inland communication. The deep vallies which separate the elevated plains, and the lofty mountains which rise between the table land and the coast, prevent the inhabitants from travelling to an adjacent district except on foot, or on horse-back. In many parts there is a total want of roads and bridges, and in others the paths lie along the edge of steep and rugged precipices, and are so narrow that the mules have scarcely room to set their feet. In the most mountainous districts of this country, as well as in New-Granada, it is customary, for those who can afford it, to travel on the backs of Indians. In this way they are carried for 15 or 20 days together, over roads winding through uninhabited forests.

Religion and Government.] The religion is Roman Catholic, and the affairs of the church are under the control of one archbishop and four bishops. The government is vested in a viceroy and a royal audience. All the important offices, civil, military and ecclesiastical, are in the hands of the European Spaniards, the creoles being excluded from all posts of honor and trust. The revolutionary movements which have so extensively agitated the other parts of Spanish America, have as yet very little affected this country. The revolutionists, however, in Chili and Buenos Ayres, have for some time past contemplated the liberation of

Peru from the Spanish yoke, and have actually sent a fleet and troops for that purpose. It is just now announced, that on the 10th of July 1821, Lima, the capital and key of the whole country, fell into their hands.

Commerce.] Peru trades with Europe, with the Philippine islands, coastwise with Guatemala and Chili, and over land with Buenos Ayres. Its exports are chiefly gold and silver, wine, brandy, sugar, pimento, Peruvian bark, salt, vicuna wool, and coarse woollens. It receives in return from Europe, manufactured goods, particularly silks, superfine cloth, lace, fine linen and other articles of luxury and show; from the Philippine islands, muslins, tea and other East India goods; from Guatemala, indigo; from Chili, wheat and copper; and from Buenos Ayres, mules and Paraguay tea.

BRAZIL.

Situation and Extent.] Brazil, including Portuguese Guiana, is bounded N. by Spanish Guiana, French Guiana, and the Atlantic Ocean; E. and S. E. by the Atlantic; and W. by Buenos Ayres, Peru and New Granada. It extends on the coast, from the mouth of the Oyapok, in lat. 4° N. to lat $33^{\circ} 3'$ S. The area is estimated at 2,200,000 square miles, or nearly one third of South America. Besides the above territory, the Portuguese have recently taken possession of all that portion of Buenos Ayres, lying south and east of the Parana, and extending on the coast to the mouth of the Plata, but their right to this country has never been acknowledged.

Divisions.] Portuguese Guiana includes nearly all the part north of the Amazon. The rest of the country is divided into the following 12 provinces, called capitánias.

Capitanias.

1. Para.
2. Marapham.
3. Seara.
4. Pernambuco.
5. Bahia.
6. Minas Geraes.

Capitanias.

7. Rio Janeiro.
8. St. Paul.
9. St. Catherina.
10. Rio Grande.
11. Goias.
12. Matto Grosso.

The ten first lie along the coast, from north to south, in the order in which they are here mentioned. Goias and Matto Grosso are in the interior.

Face of the country.] A ridge of mountains, termed the Brazilian Andes, runs parallel to the coast, at no great distance, from 12° to 32° S. lat. with the steepest side towards the sea, and sloping more gradually towards the interior. In the west, the country again rises, and by gentle gradations attains to the height of from 3,000 to 5,000 or 6,000 feet above the level of the sea, where it spreads out into those barren and sandy plains, known under the name of Campos Parexis, which occupy the very centre of South America, around the sources of the Tapajos and the head waters of the Madeira. Nearly the whole of Brazil is covered by a vast and impenetrable forest, scarcely 20,000 square

miles, out of the 2,200,000 which it contains, being as yet brought under cultivation. This immense wilderness is traversed by the principal tributaries of the Amazon and La Plata, whose head streams are separated from each other by the Andes of Chiquitos, which winds its way irregularly from east to west through the very heart of the country, between 10° and 20° S. lat.

Rivers.] The principal tributaries of the Amazon, beginning in the west, are the *Madeira*, the *Topajos*, the *Xingu*, and the *Tocantins*, all of which take their rise in the Andes of Chiquitos, and proceed from south to north, and the least of them has a course of more than 1,000 miles. The *Paraguay*, the *Paraná*, and the *Uruguay*, rise in this country and pass into Buenos Ayres. All these rivers have been heretofore described. They open a navigable communication from the ocean to almost every part of the interior.

The most remarkable streams which fall directly into the ocean, beginning in the north, are, 1. the *Parnaíba*, which discharges itself on the northern coast, in lon. 43° W. 2. The *Rio Francisco*, which rises on the western declivity of the Brazilian Andes, near the parallel of 20° S. lat. and pursuing a northerly course along the foot of the mountains, at last turns to the east, and discharges its waters under the parallel of 11 S. lat. after a course of 1,000 miles. 3. The *Rio Grande*, which rises near the sources of the Francisco, and falls into the ocean a little north of Porto Seguro, in lat. $16^{\circ} 20'$ S. 4. The *Paraíba*, which pursues a northeasterly course of 150 miles along the foot of the eastern declivity of the mountains, and discharges itself in lat. $21^{\circ} 34'$ S. 5. The *Rio Grande*, the second of the same name, discharges itself in lat. 32° S. about 60 miles from the southern boundary.

Climate.] The greater part of the country is in the torrid zone. In the neighborhood of the Amazon, and in the northern regions generally, the heat is intense, but tempered by the humidity of the climate, and by the copious dews which fall to refresh the thirsty soil. In the southern provinces the climate is mild and temperate, and sometimes cold; Fahrenheit's thermometer falling occasionally below 40° . The country generally is considered healthy; but the west wind, passing over vast forests and marshy grounds, becomes sometimes unhealthy in the interior. The rainy season commences in March, and continues till August; the dry season occupies the rest of the year. The northern provinces frequently suffer from the want of rain; vegetation languishes, and all verdure fades away under the influence of unintermitted and parching heats; but those parts which have the advantage of shelter and moisture, present the appearance of perpetual spring; and when the earth is refreshed by the periodical rains, it is clothed with the most luxuriant verdure.

Soil and Productions.] The soil, so far as it has been explored, is extremely fertile and well watered. In so extensive a country, the production, must of course be different in different parts. The northern provinces produce cotton, sugar, coffee, tobacco, and

all the common fruits and vegetables of tropical climates; while in the south, wheat and other European grains are raised in abundance, and in some districts the country swarms with innumerable herds of cattle. The forests every where abound with the greatest varieties of useful and beautiful wood, well adapted for dyeing, for cabinet work, or for ship-building. But the most precious productions of Brazil are diamonds and gold, which are found in abundance, especially in the capitania of Minas Geraes.

Gold and Diamonds.] The gold and diamonds of Brazil are chiefly found in the beds of the mountain torrents, or in deep vallies, in a stratum of rounded pebbles or gravel, from which they are separated by washing. All the head waters of the great rivers which flow northward and fall into the Amazon, as the Araguaya, the Xingu, the Tapajos, and the Madeira, are found productive of gold. The principal diamond ground is in the capitania of Minas Geraes, among the mountains in which the Rio Francisco and the Rio Grande have their rise. What is termed the Diamond district, extends about 50 miles from north to south, and 25 from east to west around the sources of these rivers. This territory is under military government, and guards are stationed on all the roads to examine travellers, and detain persons suspected of smuggling diamonds. No one is allowed to enter the Diamond district without the permission of the governor. The person who is detected in smuggling, is punished with the confiscation of his whole property and exile to Africa, or with imprisonment, sometimes for life. The average quantity of diamonds obtained in this district, may be estimated at from 20,000 to 25,000 carats annually, which are sent under a military escort to Rio Janeiro, and there lodged in the royal treasury. The collection of diamonds now in possession of the king of Portugal is the finest in the world, and is supposed to exceed in value three millions sterling. The largest diamond ever found in America, weighing almost an ounce, is one of the collection.

Agriculture.] The gold and diamonds with which Brazil abounds, have proved a great obstacle to agricultural improvement. All classes have a fatal propensity to engage in searching after these hidden treasures; and so engrossed are their minds with the sanguine prospect of immense and sudden wealth, which they expect from these projects, that they disdain to seek a moderate but certain competence through the slow process of ordinary industry. No country would yield to its inhabitants a richer or more varied produce than Brazil, containing as it does such variety of climate, and such a happy diversity of hill and valley. But all these advantages are neglected. Mining is the favorite pursuit, and so much has this prejudice affected the national manners, that a person engaged in mining is universally considered as of higher rank than an husbandman. It is remarkable also, that most of the towns in the interior of Brazil were originally mining stations, established by bands of adventurers; and it was not till all the riches of the surrounding country were exhausted, that they seriously applied themselves to agriculture.

Chief Towns.] Rio Janeiro, or *St. Sebastian*, stands in lat. $22^{\circ} 54'$ S. on the shore of a large bay or harbor, at the foot of several high mountains which rise behind it. The harbor is easy of access, and one of the finest in the world for capaciousness and security. The entrance, which is about two miles wide, is bounded on one side by a conical hill, 700 feet in height, and on the other by a huge mass of granite, which supports the castle of Santa Cruz. Near the middle lies a small island, on which Fort Lucia is built. The channel through which ships enter lies between the two forts. Though at first narrow, the harbor gradually widens to about three or four miles; in several directions it branches farther than the eye can reach, and is interspersed with numerous little islands and peninsulas. The town stands on the west side of the harbor, four miles from the entrance, on a projecting tongue of land, at the extreme point of which is a fort commanding the town. Opposite this point, and separated from it by a deep and narrow channel, is *Serpent island*, around which are the usual anchoring places for the shipping that frequent the port. The town is generally well built, the houses being usually of stone or brick, and the churches and convents are numerous. The population is estimated at 100,000, of whom about one half are negroes. This city is the chief mart of Brazil, especially of the provinces of Minas Geraes, St. Paul, Goias, and Matto Grosso, which contain the mining districts.

St. Salvador, or *Bahia*, is in lat. $12^{\circ} 45'$ S. on the bay of All Saints, which puts up from S. to N. about 40 miles, and is eight miles broad at the mouth. The town is built on the eastern shore of the bay, commencing about one mile from the point at the entrance. It extends upwards of three miles along the coast, and near the centre, more than a mile into the interior, gradually narrowing, however, towards each extremity. A single street runs along the shore the whole length of the town. Immediately back of this, the land rises suddenly to the height of 400 feet, and the principal part of the town is on the top of the hill, from which there is a magnificent prospect of the bay, and the surrounding country. The descent from the upper to the lower town is steep and laborious, and heavy packages are conveyed up and down by cranes and other machinery. The harbor is well defended by numerous forts and batteries, and affords good anchorage close to the shore, where vessels lie perfectly safe from every wind. The town contains numerous churches and convents, many of them elegant, and the houses are almost universally of stone, and handsomely built. The population is estimated at upwards of 100,000, of whom 30,000 are whites, 30,000 mulattoes, and the rest negroes. The commerce is very extensive.

Pernambuco lies on the coast N. E. of St. Salvador, in lat. 8° S. The town consists of three divisions, Recife, St. Antonio, and Boa Vista. The division of Recife, which is nearest the sea, and where the principal part of the business is transacted, is built at the extremity of a long narrow sand bank, which projects southward from the main land. The division of St. Antonio, the largest,

and handsomest part of the town, is on a sandy island, connected with Recife by a narrow bridge. Boa Vista, situated on the continent, and united with St. Antonio by a wooden bridge, consists chiefly of small houses built in a straggling manner. The harbor is formed by a reef of rocks, which runs in front of the division of Recife, and parallel with it, at a very small distance. It has two entrances, defended by two forts. The tide enters under the bridges, and forms a large expanse of water more than three miles in length, having much the appearance of a lake, on the north side of the town. Pernambuco is a thriving place, inhabited by many opulent merchants, who carry on considerable commerce, chiefly in cotton. The population is estimated at 32,000.

Para, the capital of the province of the same name, is on the river Tocantins, 60 miles from its mouth. The town contains about 10,000 inhabitants, who are in general very poor. The commerce of the town is very limited, the navigation of the Tocantins being difficult and seldom attempted except by small craft. *Maranhão*, or *St. Louis de Maranhão*, is on an island of the same name, at the mouth of three small rivers which discharge themselves on the northern coast in lon. $43^{\circ} 37' W$. It has a convenient harbor defended by a strong castle, and about 15,000 inhabitants. *Paraíba* is a small town of 4,000 inhabitants, about 10 miles from the mouth of a river of the same name, which discharges itself in $7^{\circ} S$. lat.

Santos, situated on the coast W. S. W. of Rio Janeiro, is a place of considerable commerce, being the storehouse of the capitania of St. Paul, and employing many vessels in the coasting trade to the Rio de la Plata. The situation is low and unhealthy. The number of inhabitants is about 6,000.

St. Paul, the capital of the capitania of the same name, is an interior town about 40 miles from Santos, in the neighborhood of gold mines, which were formerly very productive, but have been exhausted for more than a century. The town stands on a pleasant eminence, surrounded on three sides by low meadow lands. The situation is as salubrious as in any part of South America; the surrounding country is very fertile, and since the abandonment of the mines has been well cultivated. The population is 15,000, of which number 500 are clergy, including all orders.

St. Catherine is on an island of the same name, south of Santos. The town is well built and contains about 6,000 inhabitants. It has little trade, but affords an agreeable retirement to merchants who have discontinued business, and other persons of independent fortunes.

Rio Grande, or *St. Pedro*, near the southern extremity of Brazil, in about lat. $32^{\circ} S$. is a new but very flourishing commercial town. The port is dangerous to enter, the water being shoal, and a violent sea always running. There is, notwithstanding, a great trade carried on from this place to all the ports of Brazil, in brigs and small vessels that do not draw above 10 feet water. The vicinity of the town is very populous, the number of inhabitants in a circuit of 20 leagues being estimated at 100,000. Their prin-

principal occupation is the breeding of cattle, and the number of hides exported from Rio Grande is almost incredible. Wheat is also shipped from this port to all the towns on the coast.

Villa Rica, the capital of the province of Minas Geraes, is in the interior, 250 miles north of Rio Janeiro, in the vicinity of gold mines, which for many years were esteemed the richest on the globe. Between 1730 and 1750, when they were in the height of their prosperity, the king's fifth is said to have amounted to at least a million sterling annually. These mines are now much less productive than formerly; and the town in consequence has begun to decline. The inhabitants are represented as extremely indolent, and perpetually indulging in visionary prospects of sudden wealth. Contemplating the immense fortunes accumulated by their ancestors from the mines, they have become averse to sober industry. The town is pleasantly situated on the side of a large mountain, and most of the streets range in steps from the base to the summit. The population is about 20,000.

Tejuco, the capital of the diamond district, lies 200 miles N. of Villa Rica, near the sources of the Jigitonhonha, a branch of the Rio Grande. The number of inhabitants is about 6,000, who are dependent for a supply of provisions on farms situated several leagues distant, the district being very sterile.

Cuiaba, the most western of the mining stations in Brazil, is on a river of the same name, 96 leagues from its confluence with the Paraguay. The town and its dependencies are supposed to contain 30,000 inhabitants. The country around is well adapted for cultivation, and has rich gold mines.

Inland Communication.] The roads in the interior are frequently bad; although there are some which have been made at great expense, and which are tolerably good. The road from the coast to St. Paul, which passes over lofty mountains, is carried through deep forests, and frequently a path is cut through the solid rock, at a vast expence. The usual mode of travelling and of transporting produce is by mules. The communication between the coast and the mining district around Cuiaba, is carried on from St. Paul and Santos by means of the intervening rivers. The following is the common route from St. Paul to Cuiaba: from St. Paul to the banks of the Tiete, a branch of the Parana which passes within a few leagues of the town; then down the Tiete into the Parana, and down the Parana, to the mouth of the Rio Pardo, which falls into it from the west. Proceeding up the Rio Pardo and its branches, you arrive within a short distance of the branches of the Taquari, a branch of the Paraguay. Crossing the portage to the Taquari, you descend that river to the Paraguay, and proceed up the Paraguay to the Porrudos, and up the Porrudos, to the mouth of the Cuiaba, and up the Cuiaba to the town of the same name. By this route, salt, iron, ammunition, &c. are sent annually by the government of Brazil to the western districts. Trading parties frequently arrive at St. Paul, from Cuiaba, in the month of February, and return in April or May.

Population.] The total population at present is estimated at 2,400,000. In 1792 it consisted, according to Hassel, of 2,184,273, of which number one sixth were whites of Portuguese origin, one half negroes and mulattoes, and the remainder independant Indians. From 16,000 to 20,000 negroes have usually been imported annually from Africa. The Indians occupy nearly the whole country, except the districts along the coast. They are hostile to the whites, and frequently make incursions upon the infant settlements in the interior. A considerable district lying between the mountains and the coast, to the east of the province of Minas Geraes, is inhabited by a race of cannibals called the Anthropophagi.

Government and Religion.] Brazil is a Portuguese colony, governed by a viceroy. In the year 1806, when Portugal was invaded by the French, the royal family, to escape the impending danger, removed to Brazil and established their government at Rio Janeiro, which continued for 14 years to be the capital of the Portuguese possessions in both hemispheres. The king has now returned to Europe, and Brazil is reduced to its former state of colonial dependence on the mother country. The religion is Roman Catholic, under one archbishop and eight bishops.

Commerce.] The commerce of Brazil was formerly subjected by the Portuguese government, to all the usual restraints imposed by the colonial system of Europe. But after the emigration of the court to Rio Janeiro, the old restrictions were done away, and a commercial treaty was concluded with Great Britain, by which all the ports of the country were opened to British vessels and produce, on payment of a duty of 15 per cent. British manufactures of every description are now imported to a great extent. Portugal continues to send oil, wine, brandy, linens and cottons. From the United States are imported flour, salted provisions, household furniture and naval stores. India and China goods are also in great plenty. The principal exports are cotton, coffee, sugar, tobacco, and Brazil wood from the northern provinces; gold and diamonds, from the middle; and wheat, hides, horn, hair and tallow from the southern.

BUENOS AYRES.

Situation and Extent.] Buenos Ayres is bounded N. by Peru; E. by Brazil; S. E. by the Atlantic Ocean; S. by Patagonia, and W. by the Andes, which separate it from Chili and Peru. The desert of Atacama, lying along the coast between Peru and Chili, is also included in this country, which makes the Pacific ocean the western boundary for nearly 300 miles. It extends from 14° to 38° 30' S. lat. a distance of more than 1,700 miles, and the number of square miles is computed at 1,300,000.

Divisions.] This country was divided in 1778 into eight intendancies, and each intendancy was subdivided into partidos or districts, which took their names from their principal towns.

Intendancies.

Chief towns.

- | | |
|------------------|---|
| 1. Buenos Ayres, | Buenos Ayres, Montevideo, S'ta Fe, Corrientes. |
| 2. Paraguay, | Assumption, Candelaria. |
| 3. Cordova, | Cordova, Mendoza. S. Juan. S. Luis, Rioja. |
| 4. Salta, | § Salta, S. Miguel de Tucuman, Santiago del Estero, Catamarca, Jujuy. |
| 5. Potosi, | Potosi, Chayanta, Chicas. |
| 6. Charcas, | Chuquisaca or La Plata, Yamparaes, Oruro. |
| 7. La Paz, | La Paz, Sicasica, Pacajes, Omasuyos. |
| 8. Cochabamba, | Orepesa, Santa Cruz de la Sierra, Mizque. |

Besides the intendancies there are the two military governments of Chiquitos and Moxos, which comprehend very extensive tracts in the northern part of the country inhabited principally by Indians.

Face of the Country.] The chain of the Andes runs from south to north along the whole western boundary, and the country for several hundred miles to the east of the Andes is generally mountainous; the territory east of the rivers Paraguay and Parana is a fine, waving, well watered country; the intermediate district, lying between these rivers and the mountains, and extending from north to south through the whole length of the country, consists of extensive plains. In the north these plains are elevated, and during the rainy season are in many parts liable to be overflowed; in the south they are called Pampas, and are remarkably dry and destitute of trees. One of the Pampas, which commences near the banks of the Parana, extends beyond the southern boundary into Patagonia, and measured in its entire extent is 1,500 miles long, and from the ocean to its western limits 500 broad. Over all this immense space there are no trees, no hills, not a single object to relieve or vary the scene. The eye passes over it as over the ocean in a calm.

Climate.] In so extensive a country there is of course a considerable variety of climate. In the plains the heat of summer is extremely oppressive, while in the more elevated regions the atmosphere is cool and healthy. At the city of Buenos Ayres, in the southern part of the country, the thermometer occasionally in the course of the winter descends to the freezing point, but if this happens frequently the winter is reckoned severe. The north winds invariably bring heat, and have the effect of the Sirocco on the feelings. When moderate they continue for several days, but when violent they seldom last longer than 24 hours, shifting to the south and southeast with rain and thunder. The southwest winds blowing over the immense plains or pampas in the south, are called Pamperos. During their prevalence the atmosphere is remarkably dry, and animal putrefaction scarcely goes on at all. Animal substances dry up, and this quality in the air enables the inhabitants to burn in their furnaces and kilns, the flesh and bones of animals. Sheep were formerly dried, stacked,

and sold at two dollars and a half the hundred for these purposes.

Soil and productions.] A large portion of the soil is fertile, and owing to the variety of climate, capable of producing all the common fruits and vegetables of the temperate and torrid zones. Such, however, are the temptations to pasturage, for which the country is eminently adapted, that agriculture has been hitherto almost entirely neglected. Immense herds of cattle and horses graze on the extensive plains, and constitute at this time the principal source of wealth. The territory east of the Paraguay and Parana is considered the fairest portion of the country, the soil being every where exceedingly fertile, producing the sugar cane, the orange, fig, olive and vine, together with wheat, Indian corn and barley. Hitherto, however, this fine soil has been appropriated chiefly to pasturage. The grounds in the immediate neighborhood of the cities are in general highly improved. The province of Paraguay produces that singular herb called *matte* or *paraguay tea*, which, being prepared by boiling it in water like common tea, makes the favorite beverage of the inhabitants, and is extensively used in various parts of South America. Large quantities of it are annually exported to Peru and Chili.

Rivers.] The *Paraguay* is the principal river of this country. It rises in the Andes of Chiquitos, in the very centre of South America, and pursuing a southerly course of more than 2,000 miles enters the ocean by a mouth 150 miles broad, between cape Santa Maria on the north, and cape St. Antonio on the south. Its principal tributaries are the Parana and the Uruguay from the east, and the Pilcomayo, the Vermejo, the Salado, and the Salladillo from the west. From the junction of the Parana to the junction of the Uruguay it is usually called Parana river; and from the junction of the Uruguay to the ocean, the Rio de la Plata. It is navigable for large vessels to Assumption, a little above the mouth of the Pilcomayo, and nearly 1,000 miles from the ocean; and for small craft to the 16th degree of S. lat. Just above this parallel it overflows its banks, during the rainy seasons, and spreads itself over the flat country, forming an immense lake, called Lake Xarayes, which is generally 330 miles long and 120 broad, but so shallow that it is not navigable in any part except for canoes and small boats.

The *Parana*, which robs the Paraguay of its name, rises in the mountains of Brazil in the province of Minas Geraes, and running on the whole in a southwesterly direction for about 1,000 miles, joins the Paraguay at Corrientes. It runs in a broad, deep channel, and seldom overflows its banks. In lat. 24° is the fall of *Itu*, formed by a collection of rocks, which rise from the bed of the river in separate masses and leave channels for the passage of the water. Boats pass down without difficulty and are drawn up by ropes.

The *Uruguay* rises on the declivity of the Brazilian Andes in the province of Rio Grande, near the parallel of 25° S. lat. and pursues a southwesterly course of more than 1,000 miles. It is

navigable for 200 miles from its mouth, but higher up the navigation is interrupted by rapids and falls, which prevent the ascent of every thing but canoes and flat bottomed boats. The *Rio Negro* is an eastern branch of the Uruguay, and joins it 54 miles from its mouth. It is navigable for large vessels 40 miles

The *Pilcomayo*, the largest western branch of the Paraguay, rises in the Andes, near the parallel of 20° N. lat. and after flowing in an easterly direction for 600 miles through the mountainous country, turns to the S. E. and traversing a level country for more than 400 miles, falls into the Paraguay by two mouths 50 miles apart. It is navigable, except in dry seasons, nearly to its source, though the rapids occasion some interruption. During the rainy season, the banks near its mouth are overflowed to a great distance.

The *Vermejo* rises in a mountainous district near the sources of the Pilcomayo, and flowing S. E. joins the Paraguay in about 27° S. lat. In length and size it is not greatly inferior to the Pilcomayo. Its current is very gentle, and the ascent, by the aid of regular southern breezes, is as easy as its descent. Few rivers are equally navigable. The *Salado*, which discharges itself at Santa Fe, in lat. $31^{\circ} 40'$ S. after a southeasterly course of 800 miles, is difficult of navigation. The *Saladillo*, which falls into the Plata about 50 miles from Cape St. Antonio, after a southeasterly course of several hundred miles, may be regarded as a continuation of the Rio Quinto, which during the greater part of the year loses itself in a marshy lake, but in the rainy season, communicates by various channels with the Saladillo.

The *Rio Dulce* rises in the mountains of the interior, and flowing parallel with the Salado for a considerable distance, loses itself in the salt lakes N. W. of Santa Fe. In the northern part of the country, the Mamore, and several other head streams of the Madeira, rise on the N. side of the Andes of Chiquitos, and pass into Peru.

Lake] Lake *Titicaca* is in the northwest part of the country between two ridges of the Andes. It is about 240 miles in circumference, and is sufficiently deep to be navigated by the largest vessels. It contains several islands, one of which was the residence of Manco Capac, the first of the incas, and the illustrious founder of the Peruvian monarchy.

Desert of Atacama.] The desert of Atacama lies on the western side of the Andes, along the coast of the Pacific Ocean, between Peru and Chili. From the northern boundary of Chili to Atacama in Peru is a distance of nearly 300 miles, and in all this distance the road passes over a dry sandy plain, where the traveller meets no living thing either of the vegetable or animal kingdom. His path is marked only by the bleached bones of mules, which have perished in attempting to force a passage over this terrible waste. In travelling from Peru to Chili, instead of passing this dreary region, it is generally thought safer to take the road along the ridge of the Andes over giddy precipices and narrow passes. Post riders sometimes cross the desert, but few or no traders

ever venture to pass that way; nor, it is presumed, would any military leader be induced lightly to encounter its difficulties.

Minerals.] In the mountainous districts along the Andes, almost every town and valley from Mendoza to La Paz, has had, or now has some productive mine in its neighborhood. A short time since there were 73 mines in actual operation within this country, viz. 30 of gold, 27 of silver, 2 of tin, 7 of copper and 7 of lead. The richest of these are the celebrated silver mines of Potosi, which were discovered by accident, in 1545 by an Indian named Hualpa, who in climbing up the rocks in pursuit of some mountain goats, laid hold of a small shrub to support himself, when the roots gave way, and opened to his view a mass of pure silver. It was in a mountain of a conical shape, about 18 miles in circumference at the base, and rising to the height of 4360 feet above the plain. From the discovery of the mines till 1803, they have yielded £237,358,334 sterling, or nearly £1,000,000 annually, which has paid the royal duties.

Salt.] The extensive plains lying between the Paraguay and the mountains, and watered by the Pilcomayo, the Vermejo, the Salado, and the Dulce, abound with salt. All these rivers yield excellent water until they leave the hilly country, after which they become brackish. Numerous salt lakes occur in different parts of this territory. In the pampas to the southwest of Buenos Ayres, there are also lakes which produce salt of a very fine quality.

Chief towns.] *Buenos Ayres*, the capital, is built on the S. W. bank of the Rio de la Plata, 180 miles from its mouth. The river here is 30 miles broad, and is merely an open road. Ship's cannot approach within three leagues of the shore, and are compelled to unload by lighters, and to resort to the bay of Barragan, 23 or 24 miles below, to wait for their cargoes. The navigation of the Plata to Buenos Ayres, is extremely dangerous, owing not only to rocks, sand banks, and shallows, which abound in many parts of the river, but likewise to the impetuous blasts, called Pamperos, which occasionally sweep over it with destructive fury. The town is regularly laid out, the streets intersecting each other at right angles. In the middle of the town is a large area, 40 rods square, on the sides of which are the castle, the cathedral, and the town hall. All these edifices, together with the churches, convents and hospitals, are built of a beautiful white stone, found in a plain near the town. The population is estimated at 62,000, one half of whom are whites, and the rest, Indians, negroes, mulattoes, and mestizoes. The commerce of the town is very extensive, the port being the outlet for the produce, not only of the whole valley of the Plata, but also of large districts of Peru and Chili.

Monte Video stands on the north shore of the Plata, 120 miles E. of Buenos Ayres, and occupies the whole of a peninsular promontory, which projects southward from the main land. The fortifications are on the isthmus to the north of the town, and are

very strong, being regular works built of stone. The harbor, which lies on the west of the town, is of a circular shape, four miles in diameter, with a narrow entrance. It is deep enough for large ships, and is the best in the Rio de la Plata. The high mountain from which the town derives its name, is on the opposite side of the bay. The houses are all of stone or brick, usually one story high, and being built on an ascent, and interspersed with gardens and trees, make a handsome appearance from the harbor. The population is variously estimated from 10,000 to 20,000. In 1817, Monte Video was taken by the Portuguese.

Potosi, famous for its rich silver mines, lies in the Andes, in lat. $20^{\circ} 26'$ near one of the sources of the Pilcomayo, and on the S. side of the mountain of the same name. The air of the mountain is cold, and the adjacent country is remarkably barren, provisions and fuel being brought from a great distance; yet the richness of the mines has drawn hither a large population. The houses in general are well built and most sumptuously furnished. The churches are remarkably magnificent, and profusely decorated with ornaments of gold and silver. The population is estimated at 100,000, of whom 30,000 are employed in the adjacent mines. About 10,000 of the inhabitants are Spaniards, many of them noble, and very wealthy, and magnificent in their mode of living.

Assumption, the capital of Paraguay, stands on the E. bank of the river Paraguay, a little above the mouth of the Pilcomayo, and 977 miles from the sea, in the midst of a very fertile country. The population is 7,000, consisting of Spaniards, Indians, and mestizoes. The Spaniards pride themselves on their descent from some of the best families of Spain. *Corrientes*, situated at the confluence of the Parana, with the Paraguay, contains 5,000 inhabitants. *Santa Fe*, at the mouth of the Salado, has about 6,000 inhabitants. *Cordova* is on the small river Primero, which loses itself in one of the salt lakes to the N. W. of Santa Fe. It has a university, and about 6,000 inhabitants. *Santiago del Estero* lies north of Cordova, on a plain surrounded by forests, on the west bank of the Dulce, and contains 500 families.

The principal towns in the mountainous country, not already mentioned, beginning in the south, are *Mendoza*, which lies at the foot of the eastern declivity of the Andes, and contains 21,000 inhabitants; *St. Juan*, lying also at the foot of the Andes, north of Mendoza, and containing 19,000 inhabitants; *Rioja*, still farther north; *Tucuman*, or *St. Miguel de Tucuman*, on the Dulce, more than 100 miles above Santiago del Estero; *Salta* on a branch of the Vermejo, with 9,000 inhabitants; *Jujuy*, a small town to the north of Salta; *La Plata* or *Chiquisica*, about 60 miles N. E. of Potosi, with 14,000 inhabitants; *Charca*, or *Chayanta*, lying north of Potosi, and containing 30,000 inhabitants; *Oruro*, in the beautiful and populous valley of Cochabamba, 70 miles N. N. W. of Potosi, with 17,000 inhabitants; *La Paz*, in a fertile valley at the foot of the Andes, near the S. E. extremity of Lake Titicaca, with 20,000

inhabitants; and *Santa Cruz de la Sierra*, on the river Guapay, one of the head streams of the Madeira.

Mode of travelling.] The road from Buenos Ayres to Mendoza, a distance of 900 miles, and from Buenos Ayres to Tucuman, which is still farther, pass across the Pampas, and the usual mode of transporting produce, in wagons drawn by oxen, which at a distance look like thatched cabins slowly moving over the plain. There are few places of refreshment or repair, and the wagoner usually carries with him the provision necessary for his support. The oxen are unyoked at night, and occasionally through the day, and permitted to seek their food in the high grass, with which the pampas are covered. Thus the carrier pursues his way over a waste for weeks in succession. The route from Buenos Ayres to Mendoza, is usually performed in 30 days.

In the mountainous country, mules are universally used for transportation, the road frequently leading over rugged precipices, and through narrow passes, where any other mode of conveyance would be impracticable. The produce of the mines of Potosi is conveyed to Buenos Ayres, a distance of nearly 2,000 miles, on the backs of mules. The carriers who make a business of transportation by mules, have from 50 to 100 of these animals in a drove, and like the wagoners of the plains, they turn them loose at night to find their provisions for themselves.

Population.] According to the official estimates furnished in 1817, by the government of Buenos Ayres to the deputies of the United States, the population was 1,300,000, exclusive of Indians. The civilized Indians alone, it is supposed, amount to more than 700,000. The population is composed, as in the other Spanish colonies, of whites, Indians, mestizoes, negroes, and mulattoes. The number of negroes and mulattoes is very small. The most populous districts are around the towns on the coast, and near the mouths of the great rivers, and the mining districts in the west, but particularly the northwestern provinces, near the border of Peru, which were formerly attached to that country, and are still called Alto Peru, or Upper Peru. The plains in the north are almost exclusively occupied by tribes of wandering Indians.

Indians.] Under the old government, the Indians were most cruelly oppressed. They were subject to a tribute to the crown, levied on all males between the ages of 10 and 50. Those in the mining districts were besides burdened with a personal service to the crown, called the mita, which was a conscription raised among those subject to the tribute, in order to work the mines of Potosi. Thousands of these unfortunate people were marched every year to Potosi, and although the period of service was only 18 months, they were attended by a numerous train of friends and relatives, who on the eve of their entering the mines, sang melancholy dirges, and sounding a horn in solemn strains, mourned over them, with all the ceremonies which they used on the death of a relative. Their wives and children remained with the conscripts, who seldom resisted more than a year, the excessive labour and noxious air of the mines. The Indians of Upper Peru

have the appearance of habitual melancholy, and still wear mourning for the destruction of their incas. They hand down from father to son, the story of their wrongs, and constantly seek an opportunity for revenge. In 1778, they rose in rebellion against the Spaniards, and maintained the contest for three years, during which they destroyed some of the finest towns in the north-western provinces. The present government of Buenos Ayres, immediately on its establishment, released the Indians from the service of the mita, and have since abolished the tribute. These measures have done much to pacify their feelings.

Government and Revenue.] Buenos Ayres was formerly a Spanish colony, under the government of a viceroy, but a new government was established in 1810, which ruled in the name of the king of Spain till the 9th of July 1816, when it declared itself wholly independent, under the title of the United provinces of Rio de la Plata, which has since been changed for that of the United Provinces of South America. Since 1810 there have been three or four revolutions, in each of which, the form of government, so far as relates to the executive department, has been altered. During all the changes, however, there has existed a congress consisting of representatives from the several provinces. The revenue for the year 1817 was 3,037,187 dollars.

Laws.] Since the revolution many reforms have been introduced. The barbarous impositions on the Indians have been abolished. The law of primogeniture is repealed, and all titles of nobility are prohibited under pain of the loss of citizenship. One of the first decrees of the congress manumitted the off-spring of slaves born after February 1813, and emancipated all slaves imported after that period.

Religion.] The Roman Catholic religion is established as that of the state, but there are many advocates, both in conversation and writing for universal toleration. The number of monks and nuns was never very great in Buenos Ayres, when compared with other portions of the Spanish dominions, and they have diminished since the revolution. Few of the young men now apply themselves to the study of theology, since other occupations, more more tempting to their ambition, have been opened to their view.

Education.] Previous to the revolution education was discouraged. The art of printing was almost unknown. Several schools were actually suppressed at the capital, and in the dedication of independence one of the charges against the mother country is, that young men were forbidden from going to Paris to study modern science. Great attention is now paid to the establishment of schools, and the general diffusion of knowledge. There are no books prohibited: all are permitted to circulate freely, and many English works have been imported.

State of Society.] At the wealthy and influential citizens are found concentrated in the cities and towns. It is rare to find a wealthy land owner who has not a house in the city, which is his usual place of abode. Some retain the grant and grazing rights

committed to the care of peasants, are occasionally visited. The best specimen of the population is to be found in the city of Buenos Ayres. Since the revolution, the people of this city have had much intercourse with foreigners, and have greatly profited by it. Their manners, dress, and modes of thinking, have been improved by intercourse with the English, Americans, and French. Great prejudices prevail against whatever is Spanish. It is even offensive to them to be called by this name. The appellation which they have assumed, and in which they take pride, is that of South Americans.

Herdsmen.] The herdsmen or peasantry of the Pampas form a very considerable proportion of the population. Thinly strewed over the great plains, they have commonly, each one, the charge of a country many leagues in extent; they are wholly illiterate, and dwell on an immense waste, in continual solitude. From infancy the herdsman is continually on horseback, and there is, perhaps, no more expert horseman in the world. The wars that have been recently carried on in this country have called these herdsmen into the field of battle; and it is said, they make the most formidable partisan soldiery that ever existed. In courage they are inferior to none; and in adroit and rapid horsemanship they exceed what has been told of the Parthian, the Scythian or the Cossac of the Don. They are usually called *Guachos*, an epithet, like that of Yankee, originally cast on them in derision, but now no longer offensive.

The herdsman's cloak, or *poncho*, as it is called, is a square piece of cloth, a little larger than a Dutch blanket, with a slit in the middle, through which the head is put, leaving it to hang down all round. This poncho is his bed at night, and by day his cloak; a belt, a saddle cover or a bag, as fancy or necessity may require. The *Lazo*, or running noose, is an instrument used by the herdsman in managing his herd, and sometimes in attacking a foe. It is a cord or thong, made of strong hide, about 30 yards long, with an iron ring, or a loop at one end, through which a running noose may be made in an instant; the other end is fastened to the broad belt which secures the saddle. As soon as it is thrown, and takes effect, the horse, as he has been taught, stands firm, or moves off with what has been caught. The *Lazo* is thrown by a herdsman with unerring aim, either on foot or on horseback, or at full speed, at a fleeing animal or retreating foe. The *Bolas* is an instrument similar in its use to the *Lazo*. It is made with three cords of about three feet each from the knot which unites them in the middle, and to the end of each of the cords is fastened a ball of about two pounds weight. The *Bolas*, with a few twirls over the head, is thrown like a stone from a sling, and entangling about the legs of the animal at which it is directed, instantly prostrates it at the mercy of the pursuer. This instrument, as well as the *Lazo*, is usually placed behind the saddle. Mounted, and thus equipped, the herdsman is ready for a journey of a thousand miles, for the protection or the siezing of his herd, or for the defence of his country.

Mule trade.] One of the principal branches of internal commerce is the trade in mules, which are sent in droves from Salta over the Andes, into Peru. These animals are collected, from all the southeastern provinces, at Salta, where a great mule fair is held, at which the drovers attend, and each, having purchased as many as, assisted by his hirelings, he can manage, sets out on his journey to Lima; which, taking into account the circuits he is obliged to make to find pasturage for the drove, may be safely computed at not less than two thousand miles; and a great part of the way over the crags and défilés of the most rugged portions of the Andes, among which many of his mules commonly stray off and are entirely lost. To reach Lima with two thirds of the number with which the journey is commenced from Salta, is reckoned a successful voyage. In this way it is estimated that from 50,000 to 70,000 mules are sent annually into Peru. All the labor and transportation by beasts of burden in Peru has been heretofore performed entirely by mules. During the late wars in South America, the mule trade has been interrupted, and the stock of these useful animals in Peru having been nearly exhausted, the prosperity of that country has been very seriously affected by it.

Commerce and Manufactures.] Under the old government, commerce was a monopoly in the hands of merchants of Spain. At present the export and import trade is principally in the hands of the British, though the United States and other nations participate in it to a certain degree. The exports consist, principally, of hides, beef, and tallow, the great staples of the country; a variety of furs and peltry; with gold, and silver from the mines of Potosi. The imports are principally British manufactures, consisting of woollen and cotton goods of every description, hardware, hats, porter, &c.; from the United States are imported lumber, and naval stores of all kinds, salted fish, furniture, boots, shoes, &c. and from Brazil, sugar, coffee and rum. The value of the exports is estimated at \$10,000,000 per annum; and that of the imports is about the same.

CHILI.

Situation and Extent.] Chili is the long narrow country lying between the Andes and the Pacific Ocean from the 25th to the 43d degree of S. lat. It is bounded on the N. by the desert of Atacama, which separates it from Peru; E. by the Andes, which separate it from Buenos Ayres; S. by Patagonia, and W. by the Pacific Ocean. It is about 1300 miles long, and on an average 140 broad, containing about 180,000 square miles.

Divisions.] The southern part of the country, including all the territory below the river Biobio in lat. 36° 50' S. is in the possession of various tribes of independent Indians, particularly the Araucanians. The rest of the country, extending from the river Biobio to the northern boundary, is inhabited by the Spaniards and divided into the following 22 districts:

Districts.	Districts.
1. Copiapo.	12. Canquenes.
2. Huasco.	13. Itatay.
3. Coquimbo.	14. Puchacay.
4. Cuscos.	15. Concepcion.
5. Peterca.	16. Aconcagua.
6. Quillota.	17. Santa Rosa.
7. Melipilla.	18. Mapocha.
8. Rancagua.	19. Isla de Maule.
9. Colchagua.	20. Chillan.
10. Curico.	21. Rere.
11. Maule.	22. Isla de la Laxa.

The 15 first named districts border on the Pacific Ocean in the order here mentioned, beginning in the north; and many of them extend to the Andes through the whole breadth of the country; the seven last named border on the Andes.

Rivers.] Few countries are so well watered as Chili. Lying at the foot of the Andes, it naturally receives the waters which fall on the western declivity of those mountains, and rush with the rapidity of torrents directly into the Pacific Ocean. The rivers are very numerous but very short. They serve, however, to irrigate the vallies, and render them exceedingly fertile. Through a large portion of the country there is no valley nor scarcely a field, which is not so situated, that it may be regularly irrigated from some river.

The most remarkable streams, beginning in the north, are the *Salado*, which forms the northern boundary, the *Juncal*, the *Quillota*, the *Maypo*, the *Maule*, the *Bibio*, the *Tolten*, and the *Valdivia*.

Face of the country.] Chili has been called the Switzerland of America. The lofty chain of the Andes runs along its whole eastern boundary, and the country below is composed, to a considerable extent, of vallies surrounded by high mountains or ridges. In most cases there are little openings in these ridges, more or less rugged and precipitous, and passable only for mules, by means of which, the society of one valley carries on its intercourse with that in its vicinity. To the traveller who wanders over these delightful vallies, the scenery is frequently exceedingly grand. Passing from north to south, he scarcely ever loses sight of the towering summits of the Andes on the right, and now and then, ascending an eminence, or looking through an opening in the ridge, he has a distant view of the great Pacific Ocean.

Climate.] Chili may be divided, as to its climate, into two regions; the variable and humid region, south of the Maule, where the weather is changeful and it rains occasionally throughout the year, as in the United States; and the invariable and dry country to the north of that river, where it does not rain for two thirds of the year, and in the most northerly provinces of which it does not rain at all. Throughout the whole of the dry country, extending from 25° to 35° of S. lat. a distance of nearly 700 miles, not a cloud is to be seen from November to May. The atmosphere, during this

period, is perfectly clear, and the dews are scarcely perceptible, nor is the heat oppressive. The proximity of the Andes tempers the air, and the mercury fluctuates between 70 and 80 of Fahrenheit, and rarely rises to 85°. Thunder storms, so frequent on the east of the Andes, are unknown in this part of Chili. The climate, generally, is remarkably salubrious.

Soil and Productions.] The humid region, south of the river Maule, is abundantly clothed with fine timber and forest trees; but in the dry region north of that river, there is only here and there a solitary tree. All the country lying south of the parallel of 32°, including the whole of the humid region and the southern part of the dry region, is a land abounding with corn, wine and oil. The country between the parallel of 32° and the northern boundary is dry and barren of vegetable productions, but rich in mines of tin, copper, silver and gold. The principal productions are wheat, which is of an excellent quality, and extensively cultivated in the vallies; barley, which is raised in great quantity for the use of horses and mules; and hemp, which flourishes in every part where the soil can be regularly irrigated. The vine also is very generally cultivated, and with great profit, and the olive tree yields abundantly. The climate and soil are well adapted to the culture of sugar; but the inhabitants have been long accustomed to get that article from Lima, in exchange for their wheat, and they are not disposed to alter their ancient habits. Rice, likewise, would grow on the low lands, but it is brought from Lima. Cattle are everywhere numerous and of a large size.

Minerals.] Almost all the precious and useful metals abound in the northern provinces. Gold is found in the sands of the plains, brooks and rivers, and to a greater or less degree in almost every mountain and hill. Several of the mines have been wrought for centuries and have yielded a great produce. All the silver mines are found in the highest and coldest parts of the Andes, and on that account few of them are worked. The silver mine of Huasco, discovered in 1811, is the richest in the world; any given quantity of the ore, yielding more pure silver by one half than the ore of Guanaxuato, which is the richest in Mexico, and three times as much as that of Potosi. The copper mines are exceedingly numerous, and all that are worked yield at least half of the weight of the ore in refined copper. In 1787 there were more than 1,000 mines between the cities of Copiapo and Coquimbo. The copper of Coquimbo is esteemed the best in the world. The value of the gold and silver annually produced, a few years since was estimated at \$3,000,000; and that of the copper and tin is supposed to be \$500,000. Besides these metals, lead, and iron of the very best quality, are found in abundance. There are also several mines of quicksilver.

Volcanoes and Earthquakes.] There are 14 volcanoes in Chili which are in a state of constant eruption, and a still greater number that discharge smoke only at intervals. With one or two exceptions, they all lie nearly in the middle of the Andes from E. to W. so that the lava and ashes thrown out by them, never

extend beyond the mountains. Three or four earthquakes occur in Chili annually. They are however slight, and little notice is taken of them. Between the years 1520 and 1782 only five great earthquakes occurred. That on the 15th of March 1657 destroyed a great part of the capital; that on the 18th of June 1730 drove the sea against the city of Concepcion, and overthrew its walls, and that on the 26th of May 1751, completely destroyed this city, which was again inundated by the sea, and levelled with the ground all the fortresses and villages situated between 34° and 40° S. lat.

Chief Towns.] *St. Jago*, the capital, is in lat $33^{\circ} 31'$ S. in a delightful plain, on the south bank of the Mapocho, a branch of the Maypo, 90 miles from the ocean, and 21 from the Andes. The city is regularly laid out, the streets intersecting each other at right angles, and inclosing in the middle a spacious open square, on the sides of which are the principal buildings, and in the centre a beautiful fountain. Among the public buildings are a cathedral, four churches, eleven convents, seven nunneries, three hospitals, a university and a mint. The private houses are built of unburnt bricks, and on account of the earthquakes are usually of one story. The population is estimated at 46,000.

Valparaíso, the port of *St. Jago*, and the most commercial city in Chili, is built on a high rugged promontory, which projects into the ocean, forming with the shore a deep crescent, the concavity of which, opening to the north, forms the harbor. The entrance is immediate and easy, and ships of any size, or in any number, may ride in perfect safety against all winds but those from the north, which blow with great violence in winter, accompanied with a heavy sea. The town is built irregularly, the houses being scattered along the beach and over the hills and ravines of the promontory. The surrounding country is very barren, and all the vegetables and provisions consumed in the town are brought from Quillota, 36 miles distant. The population does not exceed 6,500 souls.

Concepcion, the second city in rank in Chili, stands on the north side of the Biobio a league from the sea, and contains 13,000 inhabitants. It was originally built three leagues to the north of its present position, but having been twice destroyed by earthquakes, the inhabitants removed hither. *Talcahuano*, the port of Concepcion, is six miles distant, on the S. W. side of the bay of Concepcion. This bay is one of the largest and safest on the coast of the Pacific Ocean. It is 10 miles long from N. to S. and 9 from E. to W. The mouth of the bay opens towards the north, and is divided by the island of Quiriquina into two channels; the eastern and safest is two miles broad, and the western about a mile and an half. Both have sufficient depth of water for the largest vessels. There is good anchorage under the south side of the island of Quiriquina, but the best is at the S. W. extremity of the bay, opposite the town of Talcahuano.

The most important seaports, not already mentioned, are *Copiapó*, situated immediately at the mouth of the river of the same name, in lat 27° S. The harbor affords good anchorage, is easy of

access for vessels of any size, and as it opens towards the west, is protected from the northerly and southerly winds. It is visited chiefly for the metals furnished by the mines in the vicinity, the surrounding country being barren. 2. *Coquimbo* or *La Serena*, in lat. $29^{\circ} 54'$, on the south bank of the river *Coquimbo*, within half a league of the coast. Its harbor is a fine capacious bay, easy of access, and protected from all winds, as well as from the swell of the sea. It is the chief port of the mining country, and the richest of the copper mines are in its vicinity. 3. The port of *Valdivia*, in lat. $39^{\circ} 50'$, is one of the safest, strongest, and most capacious harbors on the western coast of America; but there is no cultivated territory, or civilized population in its vicinity to make it of much importance at present. The city of *Valdivia* is nine miles from the coast, on the south bank of a river of the same name.

Roads.] The high ridges, which everywhere separate the vallies of Chili from each other, are passable only for mules. At present there are but three carriage roads in the whole country; two of these run from Santiago to Valparaiso, and the third from Santiago to Concepcion. Except these there is not another road, on which a carriage can travel with safety, out of the particular valley to which it belongs. The commerce with the provinces of Buenos Ayres is carried on through the passes of the Andes. The pass most frequented is that of Putaendo or Uspallata, on the road between Santiago and Mendoza. The distance between these two cities is 800 miles, and common carriers usually perform the journey in seven or eight days. The pass of Putaendo, and most of the others, are utterly impracticable for mules in the winter, but during that season they are continually passed on foot.

Population.] According to a census, taken about the year 1812, the population is 1,200,000, exclusive of independent tribes of Indians. With a trifling exception, the whole of this population is situated in the country north of the river Biobio; and if from this portion of Chili, is deducted all that dry, unproductive district to the north of the river Juncal, which, except a few vicuna hunters, has not an inhabitant upon it, it will appear that this population is concentrated between the rivers Juncal and Biobio, on a territory of about 100,000 square miles, making 12 to a square mile. What portion of the 1,200,000 are Indians, cannot be exactly ascertained. In almost every valley there is a town of submissive Indians, and there are besides about 50,000 held in slavery. *Mestizos* are numerous in the vicinity of all the Indian towns, and the *Huascos* or peasantry are all of this mixed class. There are very few negroes, not more than 1,000 in all the country.

Government.] Chili was formerly a Spanish colony, under the dominion of a viceroy. In 1810, during the troubles in Spain, the people took the government into their own hands; but in 1814 the Spanish troops from Peru invaded the country, and re-established the royal authority. In 1817, however, the revolutionists,

aided by an army from Buenos Ayres under General San Martin, defeated the royal troops, and restored the independence of the country. The declaration of independence is dated February 12th, 1818. The supreme authority, at present, is in the hands of a director, who is absolute. It is expected, however, that a congress will soon be called, and a government organized on republican principles.

Religion and Education.] The Roman Catholic is the established religion, and the church is very rich. There are said to be about 10,000 monks and nuns in Chili; and the religious institutions with which they are connected, hold nearly one third of the landed property of the country, besides about ten million dollars in money, lent out at an interest of five per cent. per annum. There are two bishoprics in Chili; that of Santiago, comprehending the territory north of the river Maule; and that of Concepcion, including the rest of the country, from the Maule to the southern boundary. Very little attention has been paid to education. Previous to the revolution there was no printing press in the country.

Army and Navy.] The army, in 1818, consisted of 3,400 regular troops, besides militia. The navy consisted of one vessel of 52 guns; one of 36; two of 22; one of 18; and one of 14. These vessels have all been recently purchased, and manned by foreign seamen, chiefly Americans and English. Indeed it is said, that there is not a sailor to be found among all the natives of Chili.

Revenue.] The whole amount of the revenue for the year 1817, according to the official statements of the government, was 2,177,967 dollars; and the expenditure during the same period was 2,119,595 dollars. More than two fifths of the revenue was derived from forced loans, and from fines and confiscations imposed on the property of royalists. The expenses of the new government, in time of peace, it is supposed will not exceed half a million dollars.

Commerce.] While Chili was a Spanish colony, European goods, to the amount of more than a million of dollars, were sent from the mother country, in exchange principally for gold and silver. From the opening of the ports by the revolutionists in February 1817, to July 1818, the imports into Chili in British vessels amounted to about \$1,800,000; and in vessels belonging to citizens of the United States, to about \$1,300,000. The imports consisted of arms, ammunition, iron, furniture, tobacco, and of French, India, and British manufactures, particularly the latter. The exports were gold, silver, copper, tin, wheat, hemp, hides, peltry, figs, raisins, &c.

Araucanians.] The Araucanians are a warlike tribe of Indians, inhabiting the territory included between the river Biobio, in lat. 36° 50', and the river Tolten in lat. 39°, and extending from the Andes to the Pacific. They are courteous, hospitable, humane, brave, patient of hardship, and enthusiastic lovers of liberty. The Spaniards, for more than two centuries, have in vain endeav-

ored to subdue them. From the first incursions of the Spaniards, their history furnishes a long list of battles evincive of the most determined valor, a valor not surpassed at Thermopylae or Marathon. In the last war, which was concluded by a most terrible battle in 1773, the Spaniards expended 1,700,000 dollars, but to no purpose; the Araucanians are now absolutely independent, and keep a resident minister at St. Jago.

Islands.] There are 47 islands in the Archipelago of Chiloe or Ancud at the southern extremity of Chili. Of these, 32 are peopled by the Indians and Spaniards, and the rest are uninhabited. *Chiloe*, which is by far the largest, and gives its name to the whole groupe, lies under the parallel of 43° S. lat. and is separated from the continent by a channel, in some places only a mile broad. The native Indians, called Chilotes, are remarkably ingenious, docile, and submissive to the Spaniards. They have a strong attachment to a sea-faring life, and make excellent sailors. Though the navigation of the Archipelago is very dangerous, on account of the currents, they venture fearlessly into this perilous sea in frail boats called piraguas, without either keel or deck. The principal articles of commerce furnished by these islands are lumber and fish, the former of which is sent in the form of boards, to Lima and Valparaiso.

The islands of Juan Fernandez are two small islands, lying about 110 leagues from the coast of Chili, in lat. $33^{\circ} 40'$ N. and lon. $78^{\circ} 52'$ W. They are at present uninhabited, but are celebrated as the solitary residence for several years of Alexander Selkirk, a Scotch sailor, from whose adventures De Foe wrote the popular novel of Robinson Crusoe.

PATAGONIA.

Situation and Extent.] Patagonia is bounded N. by Buenos Ayres; E. by the Atlantic Ocean; S. by the straits of Magellan, which separate it from Terra del Fuego; and W. by Chili and the Pacific Ocean. On the Atlantic coast it reaches as far north as Cape Lobos in lat. $37^{\circ} 30'$ S. and on the Pacific as far as the southern boundary of Chili in lat. 43° S. The number of square miles, according to Hassel, is 491,000.

Face of the country.] The interior of Patagonia has been very imperfectly explored, being occupied by hostile Indians. The Andes pass through the whole length of the country from north to south, parallel with the western coast, at the distance of from 200 to 300 miles. The northern part of the country east of the Andes consists of immense plains, which may be regarded as a continuation of the pampas of Buenos Ayres.

Rivers.] The principal rivers are the Rio Colorado and the Rio Negro or Cusu Leuvu. The *Colorado* is formed by a number of streams which rise in Buenos Ayres, on the eastern declivity of the Andes, between 30° and 32° S. lat. and after a

course of about 1,000 miles, generally to the southeast, it falls into the Atlantic ocean between the parallels of 39° and 40° .

The *Rio Negro*, or *Cusu Leuvu* is formed by a number of streams which rise in the Andes between 35° and 36° S. lat. It pursues an easterly course, and being joined by several branches, the principal of which is the Sanquel from the north, falls into the Atlantic near the parallel of 41° S. lat.

Inhabitants.] Patagonia is inhabited by two principal nations of Indians, the Moluches, and the Puelches. The Moluches occupy all the tract west of the Andes, and an extensive district east of the mountains. The Puelches inhabit the rest of the country, extending along the Atlantic coast and a considerable distance into the interior. Both these nations are subdivided into three or four tribes. The northern tribes of the Puelches are called by the Spaniards the Pampas, because they claim the immense plains of that name. They are of a roving disposition, and frequently attack and harass the Spanish settlements, as well as the travellers who pass from Buenos Ayres to Mendoza over the Pampas. The Tehuelhets, the most southern tribe of the Puelches, inhabit the coast of the straits of Magellan. They are very strong, well made, and warlike, and of extraordinary stature. Several of them are seven and an half feet high, and the usual height of those seen by the Spanish navigators in 1786 was from six and an half to seven feet.

Straits of Magellan.] The straits of Magellan, which separate Patagonia from Terra del Fuego, are 300 miles long, in some places several leagues broad, and in others not half a league. The navigation of these straits is dangerous in the extreme, both on account of the violence of the currents and the tempestuous weather, so that ships bound to the Pacific ocean universally prefer the passage around Cape Horn.

AMERICAN ISLANDS.

Terra del Fuego, or *the land of fire*, is a large island, separated from Patagonia by the straits of Magellan. The face of the country is represented as dreary and inhospitable. It is inhabited by savages, about whom little is known. *Statenland* is a small island, 30 miles long by 12 or 15 broad, lying east of Terra del Fuego, and separated from it by the straits of Le Maire. It is barren and desolate, but the English have a small settlement upon it.

Falkland islands consist of two large islands, with a great number of small ones surrounding them, lying between 51° and $52^{\circ}30'$ S. lat. and intersected by the meridian of 60° W. lon. The climate is so inhospitable, and the soil so barren, that they seem wholly unfitted for the habitation of men. The British attempted a settlement in 1764, but in 1774 they were ceded to Spain.

South Georgia, or *New Georgia*, in lat. $54^{\circ}30'$ S. and lon. 37° W. is a desolate island, inaccessible during a great part of the year,

on account of the ice with which it is surrounded. It is visited by the English and Americans, for the purpose of taking seals and sea elephants, which were formerly very numerous.

The *Gallapagos islands* lie in the Pacific Ocean, on both sides of the equator, between lon. 89° and 92° W. about 200 miles from the western coast of South America. They are very numerous, but only nine are of any considerable size. Albemarle, the largest, is 65 miles long and 45 broad. Many of the islands are well wooded, and abound in fine turtles.

Bermudas, or *Somers' islands*, are a cluster of small islands in the Atlantic, belonging to the English, in number about 400, but for the most part so small and barren, that they have neither inhabitants nor name. They are about 200 leagues from cape Hatteras in North Carolina, and the north point of the group is in lat. $32^{\circ} 24'$ N. lon. $63^{\circ} 28'$ W. The principal island is St. George, on which there is a town containing 300 houses. The population of the whole group is 10,381, of whom 5,462 are whites and 4,919 blacks. The Bermudas contain from 10,000 to 12,000 acres of poor land, of which nine parts in 10 are either wholly uncultivated, or reserved in woods for a supply of timber for building small ships, sloops, and shallops for sale; this being one principal occupation of the inhabitants. The air is so salubrious that invalids from the United States frequently go thither for the recovery of their health.

EUROPE.

Situation and Extent.] Europe is bounded on the N. by the Arctic or Frozen Ocean; E. by Asia, from which it is separated towards the north by the Ural mountains, and towards the south by the sea of Azoph, the Black sea, the sea of Marmora, and the Grecian Archipelago;* on the S. by the Mediterranean, which separates it from Africa; and on the W. by the Atlantic Ocean. Its greatest length, from cape St. Vincent at the southwestern extremity, to the Ural mountains, is about 4,000 miles, and from cape Matapan, at the southern extremity of Turkey, in lat. $36^{\circ} 28'$ N. to the North cape in lat. $71^{\circ} 11'$ N. it is 2,400 miles broad. The area is estimated by Hassel at 3,587,019 square miles.

* The intermediate boundary, from the Ural mountains to the sea of Azoph is variously represented by geographers. The line which approaches nearest to a natural boundary begins on the sea of Azoph, at the mouth of the Don, and follows up that river to the point where it approaches nearest to the Volga; then across to the Volga, and up that river to the mouth of the Kama, one of its branches, whose head waters rise in the Ural mountains; the boundary would therefore be completed by pursuing it along the Kama to its source.

Divisions.] Europe is commonly described under the following divisions :

- | | |
|-------------------|------------------|
| 1. Great Britain. | 9. Germany. |
| 2. Ireland. | 10. Switzerland. |
| 3. Norway. | 11. Netherlands. |
| 4. Sweden. | 12. France. |
| 5. Denmark. | 13. Spain. |
| 6. Russia. | 14. Portugal. |
| 7. Prussia. | 15. Italy. |
| 8. Austria. | 16. Turkey. |

Seas.] The following are the principal seas. 1. The *White Sea*, on the northern coast of Russia, opening into the Frozen Ocean ; 2. The *North Sea*, or *German Ocean*, which is almost inclosed by Great Britain on the west, and Netherlands, Germany, Denmark and Norway on the east. 3. The *Baltic*, which has Sweden and Denmark on the west, Germany and Prussia on the south, and Russia on the east. It is 600 miles long, from 75 to 150 broad, and contains about 120,000 square miles. 4. The *Mediterranean*, the largest sea in the world, lies between Europe on the north, Asia on the east, and Africa on the south. It is 2,000 miles long, and on an average between 400 and 500 broad, containing about 900,000 square miles. 5. The *Grecian Archipelago*, or *Ægean sea*, lies between Greece and Asia Minor, and abounds with small islands. 6. The *sea of Marmora* is a small body of water 90 miles long, lying between Turkey on the north, and Asia Minor on the south. 7. The *Black sea*, called also the *Euxine*, lies between Russia on the N. Asiatic Turkey on the E. and S. and Turkey in Europe on the W. It is 932 miles from east to west, and on an average 320 broad, containing about 300,000 square miles. 8. The *sea of Azoph* lies N. E. of the Black sea, and contains about 16,000 square miles.

Bays or Gulfs.] The principal bays in the Baltic are the Gulf of *Bothnia*, which separates Sweden from Russia, and the Gulfs of *Finland* and *Riga*, which lie wholly in Russia. The *bay of Biscay* washes the whole western coast of France, and the northern coast of Spain, and opens into the Atlantic Ocean between Cape Ortegal and the island of Ushant or Ouessant. The principal bays in the Mediterranean are the *gulf of Lyon*, on the coast of France, the *gulf of Genoa*, in the N.W. part of Italy, and the *gulf of Venice* or *Adriatic sea*, which stretches from S. E. to N. W. between Italy and Turkey.

Channels.] The *English channel* lies between England and France. *St. George's channel* lies between Great Britain and Ireland. The *Cattegat* separates Denmark from Sweden. The *Skager Rack*, which separates Denmark from Norway and opens into the North sea, is merely a continuation of the Cattegat.

Straits.] The strait of *Jenikale* connects the sea of Azoph with the Black sea ; the *Bosphorus*, or *strait of Constantinople*, connects the Black sea with the sea of Marmora ; the strait of the *Dardanelles*, the ancient *Hellespont*, connects the sea of Marmora with the Archipelago ; the strait of *Gibraltar* separates Spain from Af-

ries, and connects the Mediterranean with the Atlantic ocean ; the strait of *Dover* or *Calais* separates England from France, and connects the English channel with the North sea or German ocean ; the Baltic communicates with the Cattegat by three straits ; the most eastern, called the *Sound*, lies between the island of *Zealand* and the coast of Sweden ; the middle, called the *Great Belt*, between the islands of *Zealand* and *Funen* ; and the western, called the *Little Belt*, between the island of *Funen* and the coast of Denmark.

Rivers. The principal rivers are the following, beginning in the southwest. Into the Mediterranean flow the *Ebro* and the *Rhone* ; into the gulf of Venice, the *Po* ; into the Black sea, the *Danube*, the *Dniester*, and the *Dnieper* ; into the sea of Azoph, the *Don* ; into the Caspian sea, which lies wholly in Asia, the *Volga* ; into the gulf of Archangel, the *Dwina* ; into the gulf of Riga, the *Dwina* or *Duna* ; into the Baltic, the *Vistula* and the *Oder* ; into the North sea, the *Elbe*, the *Weser*, and the *Rhine* ; into the English channel, the *Seine* ; into the bay of Biscay, the *Loire* and the *Garonne* ; into the Atlantic ocean, the *Duero*, the *Tagus*, the *Guadiana* and the *Guadalquivir*.

Most of these rivers are confined in their course to some particular country, under which they will be most conveniently described. The *Danube*, the *Rhine*, and the *Rhone*, however, belong to no one country. The *Danube*, the largest river of Europe except the *Volga*, rises near the S. W. corner of Germany, in lat. 48° N. and after pursuing an easterly course through Germany, passes into Hungary, where it turns to the south and then to the S. E. and becomes for a short distance the boundary between Hungary and Turkey, after which its course lies wholly in Turkey till it discharges itself into the Black sea by five mouths between 44° 30' and 45° 30' of N. lat. It is 1620 miles long and is navigable, though with some interruption from shoals and rapids, to Ulm, in lon. 10° E.

The *Rhine* rises near the centre of Switzerland, and flowing N. E. falls into the lake of Constance. Issuing from that lake with a copious current, it flows west, forming the boundary between Switzerland and Germany, and then turns to the north, forming the boundary between Germany and France for a short distance, after which its course lies wholly in Germany till it enters the kingdom of the Netherlands, where it turns to the west and divides into several streams, which pursue their way under various names to the North sea. It is 700 miles long, and is navigable with few interruptions from its mouth to the lake of Constance.

The *Rhone* rises also near the centre of Switzerland, within 5 miles of the source of the *Rhine*, and flowing west falls into the lake of Geneva. Issuing from that lake it pursues a southwesterly course into France, where it turns to the south, and discharges itself by three mouths into that part of the Mediterranean called the Gulf of Lyon, after a course of 300 miles. It is the most rapid river in Europe, and the upward navigation can be performed only by draught or steam.

Mountains.] The principal ranges of mountains are, 1. The *Scandinavian* chain, which commences at the southern extremity of Norway, and running north, soon becomes the boundary between Norway and Sweden. It proceeds in a northeasterly direction, parallel with the coast of Norway, almost to the 70th degree of N. lat. where it turns to the east, and soon after to the southeast, in which direction it continues till it gradually sinks into hills and terminates among the small lakes between the gulf of Finland and the White sea. In almost every part of its course it is parallel with the coast of the Gulf of Bothnia, and in shape it resembles a horse shoe.

2. The *Pyrenees* run in an easterly direction from the bottom of the bay of Biscay to the Mediterranean, forming the boundary between France and Spain. From the western extremity a branch proceeds into Spain, and soon divides into numerous inferior chains, which diverge from each other, and spread themselves over the whole of Spain and Portugal. From the eastern extremity a branch proceeds into France, in a northeasterly direction till it reaches the sources of the Loire, where it divides into two branches, one of which proceeds in a northerly direction between the Loire and the Rhone, and the other in a northwesterly direction towards the centre of France.

3. The *Alps*, the loftiest mountains in Europe, form the northern boundary of Italy, separating it from France, Switzerland and Germany. They are in the form of an arch, with one end resting on the gulf of Genoa and the other on the gulf of Venice. Various chains proceed from the Alps in almost every direction. The *Apennines* commence near the Mediterranean at the S. W. extremity, and pursuing an easterly course around the gulf of Genoa, turn to the S. E. and pass in that direction to the southern extremity of Italy. Another chain commences near the head of the gulf of Venice at the S. E. extremity of the main range, and pursuing at first a southeasterly course, passes in a semicircular form through the centre of European Turkey, and terminates on the Black sea at Cape Emineh, in lat. $42^{\circ} 30' N.$ The principal northern branch of the Alps is the *Mount Jura* chain, which commences near Geneva, at the S. W. extremity of Switzerland, and in the first part of its course forms the boundary between Switzerland and France, after which it continues to run in a northerly direction, under the name of the *Vosges*, on the west side of the Rhine, as far as the parallel of $50^{\circ} N.$ lat. Besides these three principal branches, the Alps throw off numerous inferior chains in a northeasterly direction, which overspread nearly the whole southern half of Germany.

4. The *Carpathian mountains* encircle Hungary on three sides, separating it from Germany on the N. W. from Galicia on the N. E. and from Turkey on the S. E. At the southeast extremity of the range, a branch proceeds in a southerly direction across the Danube to the centre of European Turkey, connecting the Carpathian mountains with the great eastern branch of the Alps.

At the N. W. extremity also they are loosely connected with the mountains of Germany.

Face of the country.] Norway and Sweden are mountainous. The countries included in the three southern peninsulas, viz. Portugal, Spain, Italy and Turkey, are also traversed by mountain ranges. The same description applies to a large portion of Hungary, the southern half of Germany, nearly the whole of Switzerland, and the southeastern part of France. All the northern and western parts of France are hilly. The rest of continental Europe, comprising Netherlands, Denmark, the northern part of Germany, Prussia, and Russia, consists chiefly of plains.

Climate.] As respects climate Europe may be divided into three regions, very unequal in extent. The *first* comprehends all below the parallel of 45° N. lat. This is the climate of the olive, the vine, the mulberry and the orange. The *second*, and much the largest, includes all between the parallels of 45° and 65° . This is the climate of wheat, flax, oats, hemp, &c. The vine is also cultivated successfully as high up as the parallel of 50° . The *third* region, including all above the parallel of 65° , has a gloomy and desolate aspect. The pines and firs at first cover the hills with their constant mantle of dark green, but towards the northern part every species of vegetable which is useful to man entirely fails; and nothing appears but dwarf trees and a few scattered bushes.

GREAT BRITAIN.

Situation and Extent.] Great Britain, the largest of the European islands, is situated between 50 and $58\frac{1}{2}$ N. lat. and is bounded N. by the Atlantic Ocean; E. by the North sea or German Ocean; S. by the English channel, and W. by St. George's channel and the Atlantic Ocean. It is 530 miles long from north to south, and on an average 150 broad, the area being computed at 88,573 square miles. The figure of the island is very irregular, but bears some resemblance to a wedge, being narrow in the northern part, and growing broader towards the south, and its whole coast is deeply penetrated by bays, creeks and estuaries, which afford many safe and commodious harbors.

Divisions.] The island is divided into North-Britain or Scotland, and South-Britain or England including Wales.

ENGLAND.

Situation and Extent.] This country is bounded N. by Scotland, from which it is separated by the river Tweed, and a line run-

ing in a southwesterly direction to the Frith of Solway; E. by the German Ocean; S. by the English channel; and W. by St. George's channel. It extends from 50° to $55^{\circ} 40'$ N. lat. and contains 58,335 square miles, of which number 50,210 are in England and 8,125 are in Wales.

Divisions.] England is divided into 40 counties, and Wales into 12, which are given in the following table, arranged in geographical order.

	<i>Counties.</i>	<i>Sq. miles.</i>	<i>Pop. in 1811.</i>	<i>Chief towns.</i>
Six northern counties.	Northumberland,	1,809	172,181	Newcastle.
	Cumberland,	1,497	133,744	Carlisle.
	Durham,	1,040	177,635	Durham.
	Yorkshire,	6,013	973,113	York.
	Westmoreland,	722	45,922	Appleby.
	Lancashire,	1,806	828,309	Lancaster.
Four bordering on Wales.	Cheshire,	1,017	227,931	Chester.
	Shropshire,	1,403	194,398	Shrewsbury.
	Herefordshire,	971	94,073	Hereford.
	Monmouthshire,	516	62,127	Monmouth.
	Nottinghamshire,	774	162,900	Nottingham.
	Derbyshire,	1,077	185,487	Derby.
Twelve midland.	Staffordshire,	1,196	295,153	Stafford.
	Leicestershire,	816	150,419	Leicester.
	Rutlandshire,	200	16,380	Okeham.
	Northamptonshire,	965	141,350	Northampton.
	Warwickshire,	934	228,735	Warwick.
	Worcestershire,	674	160,546	Worcester.
	Gloucestershire,	1,122	285,514	Gloucester.
	Oxfordshire,	742	119,191	Oxford.
	Buckinghamshire,	748	117,650	Aylesbury.
	Bedfordshire,	430	70,213	Bedford.
	Lincolnshire,	2,787	237,891	Lincoln.
	Huntingdonshire,	345	42,208	Huntingdon.
Eight eastern.	Cambridgeshire,	686	101,109	Cambridge.
	Norfolk,	2,013	291,999	Norwich.
	Suffolk,	1,566	236,211	Ipswich.
	Essex,	1,525	252,473	Chelmsford.
	Hertfordshire,	602	111,654	Hertford.
	Middlesex,	297	953,276	London.
Three south- eastern.	Surry,	811	323,851	Guilford.
	Kent,	1,462	373,095	Maidstone.
	Sussex,	1,461	190,083	Lewes.
Four south- ern.	Berkshire,	744	118,277	Reading.
	Wiltshire,	1,283	193,828	Salisbury.
	Hampshire,	1,533	245,080	Winchester.
	Dorsetshire,	1,129	124,693	Dorchester.
Three south- western.	Somersetshire,	1,549	303,180	Taunton.
	Devonshire,	2,483	383,308	Exeter.
	Cornwall,	1,407	216,667	Launceston.

	<i>Counties.</i>	<i>Sq. miles.</i>	<i>Pop. in 1811.</i>	<i>Chief towns.</i>
Six North Wales.	Flintshire,	309	46,518	Flint.
	Denbighshire,	731	83,111	Denbigh.
	Carnarvonshire,	775	49,336	Carnarvon.
	Anglesea,	402	37,045	Beaumaris.
	Merionethshire,	691	30,924	Bala.
Six South Wales.	Montgomeryshire,	982	51,931	Montgomery.
	Radnorshire,	455	20,900	Presteign.
	Cardiganshire,	726	50,260	Cardigan.
	Pembrokeshire,	575	60,615	Pembroke.
	Caermarthenshire,	926	77,217	Caermarthen.
	Brecknockshire,	731	37,735	Brecknock.
	Glamorganshire,	822	85,067	Caerdiff,

Mountains.] Along the whole western side of the country, from Cornwall to Scotland, there are ranges of mountains, which may be considered as forming one connected chain. They overspread all the counties of Wales, in which country they attain their greatest elevation; Snowdon, the loftiest summit in South-Britain, rising here to the height of 3,517 feet, and Plynlymon to 2,463 feet. Two lower ranges of hills also commence in the S. W. part of the island, and extend completely across the country; one, passing in an easterly direction through the southern counties, terminates near the strait of Dover; and the other, stretching towards the N. E. in an irregular waving line, passes through the centre of the kingdom, and terminates on the eastern coast near Flam-borough head, in lat. 54° 9' N.

Face of the country.] The face of the country in England is beautifully variegated. In some parts verdant plains extend as far as the eye can reach, watered by copious streams, and covered with innumerable cattle. In others the pleasing vicissitudes of gently rising hills and bending vales, fertile in corn, waving with wood, and interspersed with meadows, offer the most delightful landscapes of rural opulence and beauty. Some tracts abound with prospects of the more romantic kind; lofty mountains, craggy rocks, deep narrow dells and tumbling torrents. Nor are there wanting as a contrast to so many agreeable scenes, the gloomy features of black, barren moors and wild uncultivated heaths. On the whole, however, few countries have a smaller proportion of land absolutely sterile and incapable of culture.

Climate.] The climate of England is liable to sudden and frequent changes, and to great variations of dryness and moisture. Owing to its insular situation, the extremes both of heat and cold are tempered, and neither the rigor of winter nor the heats of summer are felt here in the same degree as in corresponding latitudes on the continent. Hence, while in winter the seaports of Germany and the Netherlands are locked up with ice, those of England are open at all seasons. No country in the world perhaps displays such a rich and uniform verdure during so large a portion of the year; for the cold in winter is never so severe as to destroy vegetation, nor in summer does the bloom of nature

with under parching heats as in more southern climates. The summer seldom begins with any effect or constancy before the middle or end of June. The ensuing months of July, August and September are often oppressively hot. In the northern counties, the month of October may be said to usher in the winter with raw, wet, unsettled weather, and November seldom advances far before the same weather commences in the south.

Soil and Productions.] The richest soil is found in the southern and midland counties. Towards the north the country partakes of the barrenness of the neighboring Scotland; the eastern coast is in many parts sandy and marshy, while Wales and all the western counties are covered with mountains, interspersed indeed with vales of great fertility. In no country is agriculture more thoroughly understood or pursued in a grander style. The nobility and gentry mostly residing upon their estates in summer, often retain considerable farms in their own hands, and practise and encourage every agricultural improvement. Of the 32,000,000 acres which England is supposed to contain, it is calculated that about 10,500,000 are in tillage, 14,000,000 in pasturage, and the remainder uncultivated. Of the 10,500,000 acres in tillage, about 3,500,000 are occupied with barley and oats, 2,000,000 with peas, beans, buckwheat, vetches, &c. 2,000,000 with wheat, and the remaining 3,000,000 remain as fallow, or in a course of turnips. Of the uncultivated lands about 3,000,000 acres are capable of being brought into a state of cultivation.

Rivers.] The four largest rivers are the Severn, in the S. W. the Thames, in the S. E. the Humber, in the N. E. and the Mersey, in the N. W. The *Severn* rises in the mountain of Plynlymon in North Wales, and after pursuing an easterly course for some distance, turns to the south, and then to the southwest, and falls into the Bristol channel. It is 200 miles long, and is navigable almost to its source, though with difficulty on account of the shallows. Its principal branches are the Avon from the east, and the Wye from the west.

The *Thames* rises in the western part of the kingdom, near Gloucester on the Severn, and pursuing a course S. of E. for 140 miles, falls into the German ocean. It is navigable for large merchant ships to London, 60 miles from its mouth, and for barges almost to its source.

The *Humber* is a broad river, or rather estuary, formed by the union of the Trent and the Ouse. The *Trent* rises near the centre of the kingdom, and pursues a northeasterly course of more than 100 miles before it joins the Ouse. It is navigable to Burton. The *Ouse* is formed by the union of the Yore and the Swale, and flowing S. E. receives the *Wharfe*, the *Derwent* and the *Aire*. It thus forms the drain by which nearly all the waters of the extensive county of Yorkshire are conveyed to the Humber.

The *Mersey* falls into St. George's channel by a broad mouth, after a southwesterly course of not more than 50 miles in a direct line. It is navigable nearly to its source.

The other considerable rivers are the *Tweed*, which forms part of the boundary between England and Scotland; the *Tyne*, the *Wear* and the *Tees*, which discharge themselves into the North sea between the *Tweed* and the *Humber*; the *Witham*, the *Welland* and the *Great Ouse*, which fall into the estuary called the *Wash*; and lastly, the *Dee*, which falls into *St. George's* channel near the mouth of the *Mersey*.

Chief Towns.] The four principal commercial towns stand on or near the four principal rivers; *London*, on the *Thames*, in the S. E.; *Bristol*, near the *Severn*, in the S. W.; *Liverpool*, on the *Mersey*, in the N. W.; and *Hull*, on the *Humber*, in the N. E.

London, the capital of the kingdom, the greatest city in Europe, and in commerce, wealth, manufactures, arts, literature, and charitable institutions, the first city in the world, stands on both sides of the *Thames*, 60 miles from its mouth. In its widest sense, *London* comprehends the city of that name and its liberties, with the city and liberties of *Westminster*, the borough of *Southwark*, and nearly 30 of the contiguous villages. Its greatest length is from E. to W. nearly seven miles: the circumference is about 30 miles, and the included area 11,520 acres. The city of *London*, the eastern division, is the place where business is transacted, and consists chiefly of shops, warehouses, wharves, &c. *Westminster*, the western division, contains the royal palaces, the houses of lords and commons, the courts of law and government offices. *Southwark*, the southern division, on the south side of the *Thames*, is devoted to commerce and ship-building, and is distinguished by a vast number of manufactories, iron-foundries, glass-houses, &c.

The main streets of *London* run parallel with the *Thames* from E. to W. and the cross streets run mostly from N. to S. Some of them are narrow, but they are all well paved, with granite stones in the middle, and flag stones for foot passengers, on the sides. Underneath the pavements are large vaulted sewers, which carry off all the filth of the city into the *Thames*. The subterranean works of *London*, consisting of sewers, drains, water-pipes and gas-pipes, form an extensive and curious collection.

The following are the most remarkable public buildings: 1. The *Cathedral church of St. Paul*, the chief ornament of the city, and the most distinguished specimen of architecture in the British empire, is 500 feet long, 223 broad, and 340 high, to the top of the cross. 2. *Westminster-Abbey* is a grand Gothic edifice, and is the sanctuary of the illustrious dead, kings, statesmen, warriors, poets and philosophers. 3. The three royal palaces in *Westminster*, viz. *St. James' Palace*, *Buckingham House*, and *Carlton House*. 4. The *Tower of London*, anciently a royal palace, but now used as a state-prison and depository for arms, records, jewels and other property belonging to the crown. 5. The *Bank of England*, an immense pile of building. 6. *Westminster Hall*, one of the largest rooms in Europe. 7. The *Mansion House*, the residence of the Lord Mayor of *London*. 8. The *London Monument*, a noble pillar, 202 feet high, erected to commemorate the great fire of 1666. 9. *Waterloo Bridge*, one of the noblest struc-

acres of the kind in the world, built of granite, at an expense of more than £1,000,000. It was begun in 1811, and completed in 1817. Besides these and numerous other public buildings, London contains more than 500 churches, 22 hospitals, 18 asylums, 18 prisons, 107 alms-houses, and 20 dispensaries.

The principal theatres are those of *Drury-lane*, *Covent-garden* and the *Haymarket*. *Vauxhall gardens* are, perhaps, the most brilliant and magnificent place of public amusement in Europe. *Hyde Park*, on the west side of the city, contains 394 acres, and is the grand Sunday resort of pedestrians and equestrians from the metropolis.

The commerce of the port employs 3,000 vessels, measuring 600,000 tons, and manned by 45,000 seamen. The annual value of the exports and imports is £70,000,000, nearly two thirds of the whole trade of the kingdom. The manufactures consist chiefly of silk, cutlery, jewelry, watches, cut glass, books, carriages, and other fine goods and articles of elegant use. The manufactures of silk in Spitalfields, and of watches in Clerkenwell, usually employ about 7,000 people each. In general the London manufactures are esteemed the most excellent of their respective kinds, and produce higher prices than those of any other place. The population in 1811, according to the census, was 1,011,546, and the number of inhabited houses 141,732. Among the calamities recorded in the history of the city, are the great plague in 1665, which carried off more than 70,000 persons, and the great fire which broke out in the following year, and destroyed 13,200 dwelling houses, 89 churches, and other buildings, valued in all at £10,730,500.

Bristol is 117 miles west of London, on the river Avon, which is navigable for ships of great burden down to the Severn, four miles distant, where commences the Bristol channel. The harbor formerly labored under serious inconveniences, ships being left aground at the retreat of the tides, which here rise to the height of 40 feet; but since 1803 extensive works have been erected, at an expense of nearly £600,000, by means of which every difficulty has been removed, and merchant ships of all burdens now lie constantly afloat, and enter or leave the harbor at any time of the tide.

The houses in the older parts of the town are built principally of wood, and are crowded together in narrow, irregular streets, but those of more recent erection, particularly towards the suburbs and outskirts, consist of brick and stone, and are disposed in spacious streets and squares. All bulky articles are conveyed through the city on sledges, carts not being admitted for fear of damaging the arches of the vaults and sewers, which are made under all the streets. There are 18 churches, all of them neat and beautifully decorated, besides numerous meeting-houses, and places of worship for dissenters of almost every denomination. Several of the buildings for commercial purposes are elegant edifices, and the city has long been famous for its numerous and well-conducted charitable institutions.

Among the manufacturing establishments are 20 glass-houses, 18 sugar refineries, and numerous distilleries. Its brass works are the most extensive in England. Bristol has long been engaged in a very extensive foreign trade, though it has not made such rapid advances as many other ports, and particularly its great rival, Liverpool. Its foreign connections are chiefly with the West Indies; and its commerce with Ireland is also very extensive. Its internal commerce is carried on by means of the Severn, and the numerous canals with which it is connected. The population, in 1811, was 76,433. About a mile west of Bristol, close to the river, is the village of the Hot Wells, celebrated for a warm spring which has been found a powerful remedy in various diseases, and is much resorted to by invalids and the fashionable.

Liverpool is 206 miles N. W. of London, near the mouth of the Mersey, which opens to it a ready access to the sea, while a great system of canal navigation affords an inland communication with all parts of England. The town extends along the east bank of the river, about three miles, and on an average, about a mile inland. On the river side lie the docks, wharves and ware-houses, in one immense range. Towards the interior the town is prolonged into numerous suburbs, consisting of the villas and country houses of the wealthy citizens.

The houses are built of brick and covered with slate. The streets are mostly spacious and airy, some of them elegant, and the greater part lighted with gas. The public buildings are in a style of costly elegance and splendor suited to the opulence of the inhabitants. The exchange buildings, erected in 1803, at an expense of £100,000, are perhaps the most splendid structure ever raised in modern times for purposes purely commercial. There are at present 20 churches in the city attached to the establishment, and a greater number of chapels belonging to various denominations of dissenters. The Liverpool docks are very numerous and form a remarkable feature in the port. They cover in all an area of 77 acres, and are superior to those of any other port in Great Britain.

The growth of Liverpool in population and commerce has been remarkably rapid. In 1700 the number of inhabitants was only 5,000; in 1811 it was 94,376, exclusive of 7,000 sailors and the inhabitants of the villages nearly connected with the town, which would have made probably 120,000. The number of vessels which paid dock duties in 1819, was 7,849, measuring 867,318 tons. The most important branch of commerce is the trade with Ireland, and next to this the trade with the United States of America. More than three fourths of all the commerce between Great Britain and the United States is carried on from this port. The principal cause of the prosperity of Liverpool is its connection by means of canals with the great manufacturing towns of the northern counties.

Hull, or Kingston upon Hull, is 174 miles north of London, on the Humber, at the point where this river receives the Hull. From

the point where the two rivers meet the town extends westward nearly two miles along the north bank of the Humber, and rather more northward along the west bank of the Hull. From the streets which line the Hull and the Humber others branch off into the interior; from the former towards the west, and from the latter towards the north, crossing each other in various places, though irregularly. There are numerous docks along the banks of the rivers, some of which are of great extent. The old dock, which enters immediately from the river Hull, about 300 yards from its mouth, is 200 yards long, 85 feet wide and 22 feet deep, covering an area of 10 acres, and capable of containing 130 vessels of 300 tons. Almost the whole town is of brick, and in general well built, paved, and lighted.

The town is admirably situated for trade; the Humber, on which it stands, being the common outlet of the Derwent, the Ouse, the Aire, the Don, and the Trent; rivers which spread out widely and open communications with all the northern and central parts of the kingdom. The foreign trade is principally to the Baltic; but a regular traffic is also kept up with the southern parts of Europe, the West Indies and America. Hull is more extensively engaged in the whale fishery, by far, than any other port in Britain. The number of whale ships for several years past has been about 60. The population of the town in 1811 was 26,792, but including sailors and the adjoining villages it is upwards of 40,000.

Portsmouth, the principal rendezvous of the British navy, is in the English channel, on the west side of the island of Portsea, at the mouth of the bay termed Portsmouth harbor. This harbor decidedly excels every other in Great Britain for capaciousness, depth and security. It is capable of containing almost the whole British navy, and the largest ships may ride in it with safety in the most violent storms, and without touching the ground even at the lowest tide. Another capital advantage of the harbor is the neighborhood of the famous roadstead of Spithead, between Portsmouth and the Isle of Wight, which is so spacious that it can contain 1,000 sail of vessels in the greatest security. The dockyard of Portsmouth is a vast establishment, provided with every thing necessary for building, repairing and equipping the largest fleets. More than 4,000 workmen have been sometimes employed in it at one time. The fortifications of the town are the most complete and regular in Great Britain, and are deemed impregnable. The population in 1811, including the suburbs, was 40,567.

Plymouth, celebrated for its harbor and docks, is 216 miles W. by S. of London, at the head of the capacious haven of Plymouth Sound, which is formed at the confluence of the rivers Plym and Tamar. The Plym enters on the E. side of the Sound, and the Tamar on the W. and the buildings extend over the tongue of land included between them. The town of Plymouth occupies the eastern part of this tongue of land being at the mouth of the Plym, and about a mile and a half to the west, on the Tamar, stands the Dock, or Plymouth Dock, a separate town, but con-

nected with Plymouth by a continued line of buildings. The harbor, which is very secure and sufficiently capacious to contain about 2,000 sail of shipping, consists of several parts. Catwater harbor is formed by the estuary of the Plym. The Hamoaze, which is occupied by the navy, is a magnificent basin at the mouth of the Tamar, about four miles long and half a mile wide, and is filled with moorings of large iron chains for 100 sail of the line. The dock-yard of Plymouth extends in a circular sweep along the shores of the Hamoaze, 3,500 feet in length, with a width in the middle of 1600 feet, and at each extremity of 1000, thus including an area of 96 acres. It is provided with docks, an anchor-manufactory, rope-walks, sail-lofts, and magazines of naval stores of every description on a most magnificent scale.

Plymouth Sound, which lies in front of the Hamoaze and Catwater harbors, forms now an excellent roadstead, being rendered secure by the construction of the breakwater across its entrance. This work, which has been going on for years, and is not yet finished, is the greatest of the kind ever undertaken in Great Britain. It is designed as a barrier against the heavy swell, which is here almost continually rolling in from the Atlantic, and consists of a mole or vast heap of stones stretching across the entrance of the Sound, and occupying nearly half its width in the middle, leaving a free passage for vessels both on the east and west sides. It is to be 5100 feet, or nearly a mile long, 210 feet wide at the bottom, 30 feet at the top, and 40 feet high. The stones are taken from a quarry on the shore of the Sound in large blocks, not less than $1\frac{1}{2}$ or 2 tons each, and are dropped promiscuously together and left to find their own base and position. It is calculated that 2,000,000 tons of stone will be required to finish it, and the expense is estimated at £1,171,000. The result has fully answered the expectations of its projectors. In its present unfinished state 200 vessels have here found shelter, and 25 or 30 sail of the line may now ride here at all times in security. The population of Plymouth, in 1811, including the Dock and the suburbs, was 56,060.

Manchester, the great centre of the cotton trade, the greatest manufacturing town in the kingdom, and except London and Liverpool, the first in population, industry and wealth, is situated on both sides of the Irwell, a branch of the Mersey, 37 miles E. of Liverpool. It has risen to its present consequence entirely by its manufactures, and the various trades growing out of them. Of these manufactures, by far the principal, and the source of most of the rest, is that of cotton goods. The greater part of the cotton trade of Great Britain, which, besides its own consumption, supplies that of nearly all Europe, America, and the West Indies, and even partly of India, centres in Manchester, extending to the towns around it in all directions for 40 or 50 miles. The various branches of the manufacture are carried on more or less through all this district; but by far the most extensive, especially the spinning, is in Manchester. Manchester is, besides, the centre from which the raw material is distributed through all parts of the dis-

strict, and into which the scattered merchandize is again collected, when finished, to be sent to Hull, Liverpool and London, and thence all over the world. The spinning, weaving, and various other operations connected with the manufacture, are performed by machinery, and nearly the whole of these machines are now set in motion by the steam engine. The erection and keeping up of this various and complicated machinery has given rise to great iron founderies, and numerous other subordinate establishments. The principal cause which has rendered Manchester so great an emporium of manufactures is its natural situation in the midst of inexhaustible fields of coal, and on the banks of a navigable river, by means of which, and of the various canals connected with it, an uninterrupted water communication is maintained with the western and eastern coasts of the island, and all parts of the interior. The population, within the last fifty years, has rapidly increased. In 1757 it was 19,800; in 1811, 98,000 and at present is estimated at more than 110,000. The public buildings, houses, literary and charitable institutions, &c. are in a style corresponding with the opulence of the inhabitants.

Leeds, the principal seat of the woollen trade, is on the north bank of the river Aire, which is navigable from the Humber up to the town, whence the Leeds and Liverpool canal proceeds on the other hand to the west. It has thus an easy communication with the great depots on the opposite shores of the kingdom, and being amply supplied with coal from the neighboring mines, it is admirably situated for a manufacturing town. The most remarkable buildings in Leeds are the two cloth halls, where all the great sales of woollen cloth take place. The largest, where the dyed cloths are sold, is 382 feet long and 198 broad, and is divided into six departments, resembling covered streets, each containing two rows of stands. The whole number of stands is 1800. The markets are held on Tuesdays and Saturdays, and merchants are not permitted to buy or even look at the cloth at any other time. The market opens with the ringing of a bell: in a few minutes the hall is filled with merchants; each manufacturer appears behind his own stand, and the sales immediately begin. At the end of an hour and 20 minutes the bell again strikes and terminates all the proceedings. Yet in this short space sales are often made to the amount of £20,000. The white cloth hall opens when the other shuts, and is under similar regulations. The first stages of the manufacture of woollen cloth are carried on in the towns and villages of the surrounding district, where the wool goes through the operations of spinning, weaving and fulling. From all these scattered establishments the cloth is sent in its rough state to the cloth halls of Leeds, and the Leeds merchant completes the unfinished manufacture. The population of the town in 1811 was 62,534.

Birmingham, situated 87 miles N. of Bristol, and 109 N. N. W. of London, has been long distinguished as one of the first cities in the world for the variety and importance of its manufactures. It has been especially famous for metallic articles, particularly

those of iron. Here are manufactured steam engines, and other heavy iron machinery, muskets, and all sorts of fire-arms, locks, hinges, buttons, pins, screws, buckles, watch chains, vast quantities of toys, &c. Here also is a coining mill which is capable of striking between 30,000 and 40,000 pieces of money in an hour. In the various operations connected with these manufactures, every complicated and ingenious contrivance is employed from the most ponderous machines, such as steam engines, down to those framed for the most nice and minute accuracy. The prosperity of Birmingham has been greatly promoted by various canals, which connect it with the coast and with all parts of the interior. The population is 85,763.

Sheffield, which has also been long noted for its hardware manufactures, is situated 36 miles S. of Leeds, in a district abounding in coal, on the river Don, which opens a navigable communication to the Aire and the Humber. Its manufactures consist of two principal divisions, viz. cutler's goods and plated goods. To the first division belong edge-tools, files, knives of all kinds, razors, snuffers, scissors, saws, scythes, &c. Plated goods comprise an endless variety of articles, such as tea-urns, coffee-pots, cups, candlesticks, tankards, &c. The manufacture of plated goods is confined to the town of Sheffield, but that of cutler's goods extends to all the villages and hamlets for seven miles around. The population of the town in 1811 was 35,840.

Bath, celebrated for its medicinal springs, is beautifully situated on the Avon, 12 miles above Bristol. It is a famous resort of invalids and votaries of pleasure. The houses are of very beautiful construction, being built of freestone, and Bath has long been considered as one of the most elegant cities in Europe. The population is 38,434.

Newcastle is on the north bank of the Tyne, 10 miles from its mouth, in the midst of the greatest coal district in the world. From this magazine the whole of the eastern and most of the southern coast of the island, together with the opposite coast of France, Netherlands and Germany, have for centuries been supplied. The principal collieries are along the Tyne, both above and below the town, and the amount of coal annually exported is more than 1,500,000 tons. This trade is an excellent nursery for seamen. The shipping belonging to the port measures 134,149 tons, and employs 8,732 men. The population of Newcastle in 1811 was 35,711.

The other remarkable towns on the coast are. *Falmouth*, near the S. W. extremity of the island, whence packets sail regularly to Spain, the West-Indies, and other parts of the world; *Brighton* or *Brighthelmston*, one of the most fashionable places of resort in the kingdom, particularly for sea-bathing; *Dover*, on the strait of the same name, the principal place of embarkation for France; *Ramsgate*, a little further on, famous for its excellent artificial harbor, built at an expense of £600,000; *Hull*, on the eastern coast, the port from which the packets sail regularly for Holland and Germany; *Yarmouth*, a little further north, famous for the

herring fishery; *Berwick*, on the north side of the Tweed, half a mile from its mouth, famous for the salmon fishery; *Holyhead*, in Wales, at the N. W. point of the island of Anglesea, whence the packets sail regularly for Dublin; and *Milford Haven*, at the S. W. extremity of Wales, famous for its fine harbor, and the station of the packets for Waterford in Ireland.

The principal towns in the interior, not already described, are *York*, on the Ouse, the second town in rank in the kingdom; *Nottingham* on the Trent, and *Leicester* on the Soar, a branch of the Trent, both famous for the stocking manufacture; *Norwich* on the Wensom, 22 miles west of Yarmouth, containing 37,000 inhabitants, and noted for its trade and extensive manufactures; *Coventry*, near the centre of the kingdom, 18 miles S. E. of Birmingham, famous for the manufacture of ribbons and watches; *Oxford*, on the Thames, 30 miles west of London, celebrated for its university, and the magnificence of its public buildings; *Cambridge*, 51 miles N. of London, the seat of another famous university; and *Windsor*, on the Thames, 22 miles W. of London, the favorite country residence of the British kings.

Canals.] The river Trent is navigable to the centre of the kingdom, and it is there connected by canals with the Mersey, the Severn and the Thames. An inland water communication is thus opened between the four great ports of the kingdom. London is connected with Liverpool; and Bristol with Hull. There is besides a canal from the Severn to the Thames, connecting Bristol more directly with London, and another from the Severn to the Mersey connecting Bristol directly with Liverpool. The canal from Manchester to Leeds completes the water communication across the island from Liverpool to Hull. Besides these there are other canals too numerous to be mentioned. Several years since there were more than 250, intersecting the island in every direction, and imparting life and activity to commerce and manufactures.

Minerals.] The tin mines in Cornwall, at the S. W. extremity of the kingdom, are supposed to be the richest in the world. Copper is also produced in abundance in Cornwall, the adjoining county of Devonshire, and some other parts of England, but most abundantly in the N. W. part of the island of Anglesea. Lead and iron are found in various places, both in the north and south. The coal mines, the source of so much wealth and power to Great Britain, are found in the central and western parts, but particularly in the northern, around Newcastle. Mines of rock salt are found near Liverpool which produce more than 150,000 tons annually.

Government.] The islands of Great Britain and Ireland constitute one kingdom, styled the United kingdom of Great Britain and Ireland. The constitution is a hereditary monarchy, in which the power of the sovereign is controlled by the influence of the aristocracy in the house of the peers, and by that of the people in the house of commons. The house of peers consists of all the nobility of England, 16 peers from Scotland, who are the representatives of the peerage of that country, and 28 from Ireland, &c.

the representatives of the Irish peerage. The house of commons consists of 658 members, viz. 513 representatives from England and Wales, 45 from Scotland, and 100 from Ireland. These are elected by the people in the counties, cities and boroughs. The king, lords and commons, constitute the legislature, and their joint consent is necessary to the passing of every law. The king has the sole power of convoking, proroguing, or dissolving the legislature. The same parliament, if not previously dissolved, continues for the term of seven years, after which the constitution requires that a new election shall take place. The executive power resides wholly in the crown, and all honors and offices of the state are dispensed by the sovereign. The conduct of every officer, however, whether civil or military, is subject to the investigation of parliament, which may address the crown for the removal of any of its servants, in which case a compliance with its wishes immediately follows.

Judicature.] Justice, both civil and criminal, is administered by judges appointed by the crown, but who hold their offices independent of it. The decisions of the judges in the various courts have long been famed for their strict impartiality. The trial by jury is an admirable feature of English jurisprudence, and is justly considered as one of the safeguards of liberty and property. The criminal law is censured as sanguinary, and it is certain that of the numerous persons condemned to death for petty crimes, by far the greater part are respited by the humanity of the judges, and generally suffer the mitigated sentence of transportation.

Population.] The population of the United kingdom, in 1811, was about 17,000,000, divided as in the following table:

England,	9,538,827
Wales,	611,738
Scotland,	1,805,688
Army, Navy, &c.,	640,500
Total in Great Britain,	12,596,803
Ireland supposed,	4,500,000
Total in the United kingdom,	17,096,803

Nearly one half of the population are engaged in trade and manufactures, and about one third in agriculture.

Paupers.] The number of persons who received relief from the poor rates in 1815, in England and Wales, was more than 1,000,000, or one tenth of the whole population. The taxes for the support of the poor amounted in that year to nearly £8,000,000, while in Scotland they were only a few thousand pounds. In the latter country there are no poor rates, assessments for the support of the poor being made only on extraordinary occasions.

Education.] The universities at Cambridge and Oxford are among the most celebrated in Europe. The university of Oxford consists of 20 colleges and 4 halls, each of which forms an establishment within itself, having its own students and teachers, and

its own revenues and regulations, while they are all united under the government of the university. In addition to private officers in each college and hall, who see that due order and discipline are preserved, and all the liberal sciences read and taught, there are numerous public lecturers and professors. The number of fellows is 444, and the whole number of members in the university books is about 3,000, of whom 1,000 are maintained on the revenues of the university, and the rest live at their own expence. Besides the colleges and halls, the other public establishments belonging to the university are the public schools, the Bodleian library, containing one of the most valuable collection of books and manuscripts in Europe, the Radcliffe library, the Clarendon printing-house and the Ashmolean museum.

The university of Cambridge consists of 13 colleges and four halls, each of which contains apartments for students and fellows, a chapel and a library. The whole number of fellows belonging to the university a few years since was 406, and of scholars 666, besides 236 inferior officers and servants, all of whom are maintained on the various endowments. The number of members supported at their own expence is upwards of 2000, but those who reside in the university during the term, seldom exceed 1000.

Besides the universities there are several celebrated colleges and public schools, among which are those in Winchester, Eton, and Westminster. The middle and higher ranks spare no expence in the education of their sons by private tutors. The education of the lower classes was formerly much neglected, but since the introduction of the Lancasterian system of education, numerous schools have been established. In 1817 there were more than one thousand schools connected with the National Education Society, in which 200,000 children were enjoying the benefits of instruction.

Religion.] The established religion of England is Episcopacy. According to the constitution the king is considered the supreme head of the church. Next to the king are the two archbishops of Canterbury and York, under whom are 25 bishops. The archbishop of Canterbury is the primate of all England, and takes precedence of all persons with the exception of the royal family. The next order of the clergy after the bishops is that of the archdeacons, of whom there are about 60; and after these are the deacons, vicars, rectors, and curates, on whom devolve the substantial duties of the priesthood. The whole number of clergy, in 1811, was 10,434, of whom 5,397 were residents, and 5,037 non-residents. The number of chapels and churches connected with the established church at the same period was 2,533. The dissenters from the established church are Papists, Presbyterians, Independents, Baptists, Methodists, and Quakers. The whole number of places of worship belonging to Dissenters in 1811 was 3,438.

Public Debt.] Great Britain having been frequently engaged in tedious and expensive wars, has been compelled to have recourse, in order to provide for temporary exigencies, to the practice of borrowing the sum wanted for the public service. In

consequence of the facilities afforded by this system for raising the supplies, the country has gone on for nearly a century in adding to the load of its debt, until nearly half its income is now absorbed in the unprofitable expence of paying the interest due to the national creditors. In 1701 the national debt was only £6,748,080; in 1819 it was £791,867,313, and the interest about £30,000,000.

Revenue.] Taxation has kept pace with the accumulation of debt. All the ordinary articles of consumption, every transfer of property, every species of luxurious expence is subjected to heavy taxes. The most productive branches of the revenue are the excise, the customs, and the stamps, particularly the first. The amount of the revenue for the year ending 5th Jan. 1813, was £69,240,123; of which England yielded £59,014,416; Ireland £5,705,815, and Scotland £4,519,892.

Army.] The army on the peace establishment, in 1815, consisted of 129,000 men; but during the late war, the troops immediately belonging to the nation amounted to more than 600,000, and the whole number of men in arms throughout the British possessions was computed at above a million.

Navy.] The navy of Great Britain is far superior to that of any other nation on the globe. In 1811 it consisted of 254 ships of the line, 34 fifty gun ships, 280 frigates, and 523 smaller vessels. For this immense fleet the number of seamen and marines amounted to 180,000, a number which no other country, ancient or modern, could have supplied.

Manufactures.] The manufactures of England are of vast extent and give employment to a large portion of her population; and such is the ingenuity of her numerous artizans, such are the contrivances invented for the abridgment of labor, such is the minuteness with which the industry of the country is divided; such the perfection to which the workmen, by patient perseverance, each in his own particular task, have brought their respective arts; and lastly, so great is the capital which has been accumulated during ages of successful industry, that England, notwithstanding her heavy taxation, and the high wages which are paid for labor, is still enabled in all the countries to which her commodities are exported, to undersell the foreign manufacturer in his own market, and to inundate almost every country in the world with English goods. The principal manufactures are those of cotton and woollen goods. Next to these are the hardware manufactures of iron and steel, copper and brass. The silk and linen manufactures are carried on in England, but not to any great extent. The manufacture of stockings is an important branch of industry in several counties, especially in Nottinghamshire. English earthenware is finished with beauty and taste, and in great variety, principally at the potteries in Staffordshire; and glass is manufactured in various parts, chiefly in Newcastle, Sunderland and Bristol. China ware of a very superior quality is made in Derby and Worcester. In London every sort of fine and elegant manufacture is carried on.

Commerce.] The commerce of Great Britain extends to every portion of the globe. It consists almost entirely in the exchange of her manufactures for the rude produce of other countries. The value of the imports in 1814 was £24,362,124, and of the exports £37,647,874. There are employed in carrying on this extensive trade about 17,000 vessels, of the burden of about 2,100,000 tons, and navigated by 130,000 men and boys.

Fisheries.] England has extensive fisheries both at home and abroad. Salmon are caught in most of her rivers, and the seas around her coasts yield herrings, mackerel, pilchards, white fish and an abundance of shell-fish. The Newfoundland fisheries at one time employed a considerable number of vessels. The whale fishery both in the North and South seas is prosecuted to a great extent.

Islands.] The *isle of Wight* is situated opposite the coast of Hampshire, from which it is separated by a channel varying in breadth from two to seven miles. At the distance of about 70 miles from Wight to the S. W. arises the little *isle of Alderney*, off the Cape la Hogue on the French coast, and still farther to the S. W. and S. are *Guernsey* and *Jersey* with the small island of *Sark* interposed between them. Returning to the English shore, we first descry off Plymouth sound *Eddystone Lighthouse*, on a rock beat by all the fury of the ocean, the waves sometimes washing over the very summit in one sheet of foam. About 30 miles to the west of the Land's End, appear the *isles of Scilly*, said to be 145 in number, besides innumerable dreary rocks. The island of *Anglesea* lies off the N. W. coast of Wales, and the *isle of Man*, the last of the English isles worthy of notice, is in the Irish sea at about an equal distance from England, Scotland, and Ireland.

SCOTLAND.

Situation and Extent.] Scotland is bounded W. and N. by the Atlantic ocean; E. by the German ocean; S. E. by England, from which it is separated in part by the river Tweed; S. by Solway frith; and S. W. by that part of the Irish sea called the North Channel. It lies between 54° and 59° N. lat. but including the Shetland and Orkney islands, it extends to 61° 12'. and between 1° and 5° W. lon. but the Western islands extend much farther. Including all the islands it contains 30,238 square miles, of which 638 are occupied by lakes and rivers.

Divisions.] Scotland is divided into 33 counties, which are subdivided into 877 parishes.

	Counties.	Pop. in 1811.
Northern Division.	Orkney and Shetland, - - - - -	46,153
	Caithness, - - - - -	23,419
	Sutherland, - - - - -	23,629
	Ross, - - - - -	60,853
	Cromarty, } - - - - -	
	Inverness, - - - - -	78,415
Midland Division.	Argyle, - - - - -	85,585
	Bute, - - - - -	12,033
	Nairn, - - - - -	8,251
	Elgin, - - - - -	28,108
	Banff, - - - - -	34,100
	Aberdeen, - - - - -	136,903
	Kincardine, - - - - -	27,439
	Forfar, - - - - -	107,264
	Perth, - - - - -	135,093
	Fife, - - - - -	101,279
	Kinross, - - - - -	7,245
	Clackmannan, - - - - -	12,010
	Stirling, - - - - -	58,174
	Dumbarton, - - - - -	24,189
Southern Division.	Linlithgow, - - - - -	19,451
	Edinburgh, - - - - -	148,444
	Haddington, - - - - -	31,164
	Berwick, - - - - -	30,779
	Renfrew, - - - - -	92,596
	Ayr, - - - - -	103,954
	Wigton, - - - - -	26,891
	Lanark, - - - - -	191,752
	Peebles, - - - - -	9,935
	Selkirk, - - - - -	5,889
	Roxburg, - - - - -	37,230
	Dumfries, - - - - -	62,960
	Kirkcudbright, - - - - -	33,684
Total, - - - - -		1,804,804

Rivers.] Scotland has numerous rivers, which are for the most part short and rapid. Their banks, in the upper part of their course, generally display the finest and most picturesque scenery; the falls and cascades, which are everywhere frequent, greatly adding to the effect. The principal rivers which discharge themselves into the German ocean, beginning in the south, are the *Tweed*, which forms for a few miles the boundary between England and Scotland; the *Forth*, which discharges itself by a broad mouth into the Frith of Forth after an E.S.E. course of 200 miles; the *Tay*, the largest river in Scotland, and celebrated for its salmon fisheries; the *North* and *South Esk*, the latter forming the harbor of Moutrose, and the former falling into the ocean three miles farther to the north; the *Dee* and the *Don*, the first forming the harbor of Aberdeen, and the mouth of the second be-

ing two miles farther north; the *Spey*, a grand impetuous river, which rises nearly in the centre of Scotland, and after a northeasterly course of 96 miles rushes furiously into the sea; and the *Ness*, a short river, issuing from Loch Ness and connecting it with the bottom of Murray frith at Inverness. The only considerable river on the western coast is the *Clyde*, which rises near the sources of the *Tweed*, and discharges itself into the frith of Clyde, after a northwest course of 70 miles.

Sea Coast.] The coast of Scotland is very extensive, and deeply indented with long narrow arms of the sea. From Berwick, at the S. E. extremity of the kingdom, it bends N. W. to the frith of Forth, which is an extensive bay or estuary separated by a peninsula from the frith of Tay. From the mouth of the Tay, the shore proceeds N. N. E. to Kinnaird's-head. Between that promontory and Duncansby-head there is a vast bay of a triangular form, the base or eastern line of which is 70 miles. This bay is subdivided into the friths of Murray, Cromarty, and Dornoch, separated from each other by narrow peninsulas. The north coast, between Duncansby-head and Cape Wrath, along the Pentland frith, is bold, rocky and dangerous. Along the western shore are many openings or inlets, where the sea runs far inland, forming safe and commodious harbors. The frith of Clyde is a capacious bay bounded on one side by the mainland and on the other by the islands of Arran and Bute. Thence the coast extends southward to the Mull of Galloway, the southwest extremity of Scotland. Between that point and the bottom of the Solway frith, lie the deep bays of Wigton and Glenluce.

Lakes] The lakes or lochs of Scotland are numerous and extensive, and have long been celebrated for the grand and picturesque scenery by which their shores are embellished. Of these the chief in extent and beauty is *Loch Lomond*, which is 30 miles long, and in some places 8 or 9 broad, and is every where studded with romantic islands. It discharges its waters through a short outlet, at its southern extremity, into the month of the Clyde. From the bottom of Murray frith a valley extends in a S. W. direction completely across the island to the sound of Mull, and is filled with a chain of long narrow lakes and rivers, which, with a single interruption, form a natural water communication from the German ocean to the Atlantic. At the S. W. extremity of the chain is *Loch Linhe*, 40 miles long, which at one end communicates with the sea, and at the other receives from the N. E. the waters of *Loch Lochy* through the river Lochy. From Loch Lochy the distance is only 2 miles to *Loch Oich*, which discharges itself through the river Oich into Loch Ness. *Loch Ness* is 22 miles long and communicates through the river Ness with the Murray frith.

Among the other remarkable Scottish lakes are *Loch Ericht*, *Loch Rannock*, and *Loch Tay*, all of which are near the centre of Scotland and discharge themselves into the ocean through the river Tay; *Loch Awe*, which lies to the N. W. of Loch Lomond, and discharges itself into *Loch Etive*, an arm of the sea. Loch

Leven, in the eastern part of the island, communicates with the frith of Forth through the river *Leven*. *Loch Katherine* lies a few miles to the N. E. of *Loch Lomond*.

Canals.] There is a canal 2 miles long, called the Caledonian canal, extending from *Loch Lochy* to *Loch Oich* and completing a navigable communication across the northern part of the island. But the most remarkable inland navigation in Scotland is the great canal from the Forth to the Clyde. It commences on the Clyde below Glasgow and proceeds in an E. N. E. direction 35 miles to the Forth. In its dimensions it is much superior to any work of the kind in England. The English canals are from three to five feet deep, and from 20 to 40 feet wide, and the lock gates from 10 to 12 feet; but they answer the purpose of inland carriage from one town to another, for which alone they were designed. The depth of the canal between the Forth and the Clyde is seven feet; its breadth at the surface 56 feet; the locks are 75 feet long, and their gates 20 feet wide; and the summit level is at the amazing height of 155 feet above the medium full sea mark.

These two canals, with the waters which they connect, divide Scotland into three parts, styled the northern, middle and southern divisions.

Mountains.] The principal range of mountains is the *Grampian chain*, which commences at *Loch Lomond* near the mouth of the Clyde, and extends in the form of a semicircle with its concavity towards the S. E. to the eastern coast, terminating near Aberdeen at the mouth of the *Dee*. The principal summits in this range, beginning in the S. W. are *Ben Lomond*, near the lake of the same name, *Ben Ledi*, *Ben More*, *Ben Lawres*, *Shihallion*, and *Ben Vorlich*, all between 3,000 and 4,000 feet high. *Ben Nevis*, the highest mountain in Great Britain, is near the head of *Loch Linhe* on the east side. It is 4,350 feet above the level of the sea. *Cairngorm*, celebrated for the crystals found on it, called *cairn gorms* from the name of the mountain, is 60 miles to the N. of *Ben Nevis*, and rises to the height of 4060 feet.

Face of the Country.] The Grampian mountains divide the country into two parts, called the Highlands and Lowlands of Scotland. The Highlands or northern division, consist generally of an assemblage of vast and dreary mountains, interspersed with innumerable small lakes, and sometimes with fertile vallies, especially towards the south. A few of the mountains are clothed with green herbage, but in general they are covered with heath, vegetating above peat, rock or gravel, and they frequently terminate in summits of solid rock, or in vast heaps or cairns of bare and weather-beaten stones. The principal exception to these remarks is the eastern district, extending on the coast from the termination of the Grampian mountains around *Kinnaird's Head* and westward, beyond the mouth of the *Spey*, including the counties of Aberdeen, Banff, and Elgin. This district has all the characteristics of the Lowlands; in some other parts also, there are occasionally gentle hills consisting of arable soil, and sometimes flat lands of superior quality, especially along the estuaries of the

rivers. In the Lowlands the country bears a great resemblance to England. We here find every variety of surface, verdant plains, gently rising hills and bending vales interspersed with meadows; nor are there wanting, as a contrast, barren moors, and wild uncultivated heaths. In the southern part, around the sources of the Tweed and the Clyde, is a group of mountains, whence ridges of hills extend in various directions. The Cheviot hills run eastward and form for some distance the boundary between England and Scotland. Another branch proceeds north and terminates near Edinburgh under the name of the Pentland hills. A third branch runs N. W. to the mouth of the Clyde, and a fourth S. W. towards the S. W. extremity of the kingdom. The Lead Hills containing rich mines of that metal are near the centre of the group.

Soil and Productions.] In the Highlands, which comprehend about three fifths of the whole country, the arable ground bears but a small proportion to the mountainous regions, the ruggedness and sterility of which seem to defy the efforts of human industry. Yet by a judicious mode of stocking the hills and mountains with sheep and cattle, and by sheltering the country with plantations and hedges, the people of Scotland have done much for the improvement of those Alpine regions. Of late many extensive tracts of waste land have been planted with wood, and this species of improvement has been attended with much success. In many parts of the Lowlands the soil is as fertile as in any part of Great Britain, and agriculture has here reached to a great degree of perfection. The principal agricultural productions may be arranged in the following order; grass, oats, turnips, barley, wheat, beans and peas, potatoes. Of 18,943,600 English acres, which Scotland is supposed to contain, only 5,043,050 are under cultivation. Of the cultivated soil about one half is devoted to grass, one quarter to oats, and the remaining quarter to turnips, barley, wheat, &c.

Climate.] Owing to its insular situation the cold in winter is not so intense as in similar latitudes on the continent; and in summer the heat, especially on the coast, is moderated by the sea breezes. In winter it is seldom so cold as in the south of England, but that dreary season is on the other hand protracted to a greater length. The greatest height of the thermometer that has yet been observed was 92° of Fahrenheit, and the lowest at Edinburgh, was 3° below zero. In the eastern parts of Scotland there is not so much humidity as in England, but the western coasts are deluged with rain, owing to the prevalence of the west winds which bring the vapors from the Atlantic ocean. It has been estimated that on the west coast it rains or snows for 205 days in each year, while on the east coast the number is only 135.

Minerals.] The principal minerals are coal, lead, and iron. The great coal district reaches on the eastern coast from Berwick on the Tweed to Fife Ness on the north side of the frith of Forth, and stretches in a W. S. W. direction across the kingdom. It is 90 miles long and on an average 33 broad, embracing nearly 3000

square miles, and a single square mile of this area is more than sufficient for the annual supply of coal for the whole of Scotland. There is very little coal found north of this district. The principal lead mines are in the Lead Hills, near the sources of the Clyde, in the southern part of Lanarkshire. Iron is found in various places. Agates, rock-crystal, the topaz, the amethyst and other precious stones abound in the mountainous districts.

Chief Towns.] *Edinburgh*, the metropolis of Scotland, is situated on the south side of the frith of Forth, about a mile and an half from the shore. It is surrounded on all sides by lofty hills except towards the north, where it declines gently towards the sea. On the east, in the immediate vicinity of the city, are the abrupt and rocky elevations of the Calton-hill, Arthur's seat, and Salisbury-crags, which last form a continued range of naked and perpendicular rocks, rising like a wall to the height of 800 feet above the level of the sea, and presenting in a distant view a singularly wild and romantic object. The town stands on high and uneven ground, being built on three eminences, which run from east to west. The central ridge, on which a large portion of the Old town is built, is terminated abruptly on the west by a precipitous rock on which the castle is placed, while to the east it gradually inclines to the plain from which rise the lofty elevations of Arthur's seat, Salisbury-crags and the Calton-hill. The valley to the north of this ridge, which was formerly filled with water, has since been drained, and is now a marsh, nearly dry in summer. On the rising ground to the north of this valley stands the New town of Edinburgh. The ravine on the south of the central ridge is also wholly covered with buildings, as well as the southern eminence; and beyond the immediate precincts of the town towards the south, numerous villas have of late been erected, which are chiefly occupied by the more opulent class of citizens. In a great portion of the Old town the houses are crowded and irregular, and in some parts rise to the unusual height of 11 stories. The New town has been built within the last 50 years, and is laid out in streets and squares, which for beauty and regularity are not surpassed by any city in the world. The Old and New towns are connected by a mound and a bridge thrown across the valley.

Among the public buildings of Edinburgh the most remarkable is the castle. It is situated at the western extremity of the Old town, on a rugged rock, which rises on three sides from a level plain, to the height of from 150 to 200 feet. In some parts, towards the north more especially, the precipice is perpendicular, and even overhangs its base. The summit is crowned with military works, which being contrasted with the sublime and rocky scenery beneath, give an aspect to the whole inexpressibly grand and romantic. At the opposite or eastern extremity of the Old town stands the palace and abbey of Holyrood, for several centuries the residence of the monarchs of Scotland. Among the other public buildings and institutions of the city are several elegant

churches, the university, the High-school, the Royal society, and Heriot's hospital.

Edinburgh is supported chiefly by its courts of justice. Law is the leading profession; and those who derive their subsistence from this source form the chief class of its inhabitants. There are besides a considerable number who depend on the university and other seminaries; and the constant residence in Edinburgh of so many persons attached to the learned professions, has given to the society of this metropolis a polish which distinguishes it to its advantage above that of any mercantile place. But Edinburgh is the rendezvous of luxury and fashion, as well as of literature and taste. It is the resort during the winter of a great number of opulent families, who find it an advantageous place for the education of their children, and for their introduction into the circles of polite society. It is not in any sense a trading or manufacturing town, but rather the seat of luxurious consumption. The population, in 1811, exclusive of Leith, was 82,624.

Leith, the port of Edinburgh, is about 2 miles to the N. E. of the city, on both sides of the Water of Leith, at its confluence with the frith of Forth. The harbor has only 9 feet of water at neap tides, and 16 at spring tides. Within a few years it has been greatly improved by the erection of two magnificent wet docks, one of which is sufficiently large to accommodate 40 ships of 200 tons, and a third equal in size to both the others, is about to be erected in a part of the harbor where the water is deeper, and will be able to receive frigates. Leith carries on an extensive trade with almost every part of Europe, with the West Indies and America, besides a great coasting trade to the different parts of England and Scotland. The town is rapidly extending itself in various directions, and the parts recently built are laid out on a regular plan, and consist generally of elegant houses. The population in 1811 was 20,363.

Glasgow, distinguished for its extensive commerce and manufactures, is situated principally in a plain on the north side of the Clyde, along the banks of which it extends for a mile and an half, and for three quarters of a mile towards the interior, while extensive suburbs branch out in various directions. Those on the opposite side of the Clyde are connected with the body of the city by 4 bridges. The Clyde is navigable for vessels drawing seven or eight feet of water as far as the lowest bridge. The situation of Glasgow is singularly favorable for manufactures and trade, placed as it is on the borders of one of the richest coal and mineral fields in Great Britain, while, for carrying off the produce of its industry and receiving returns, the Atlantic opens to it on the one hand through the river Clyde, and the German ocean on the other through the Forth and Clyde canal and the frith of Forth. The communication of Glasgow with the country along the shores of the Clyde, has been greatly aided by steamboats, of which there are now no less than 16 plying the river. Among other manufacturing establishments there are 52 cotton mills, containing 511,200 spindles, and employing a capital of

£1,000,000; 18 works for weaving by power, which contain 2800 looms, producing 8400 pieces of cloth weekly, beside about 32,000 hand looms, 18 calico printing-works, and 9 iron foundries. There are many magnificent public buildings in Glasgow of which the cathedral or high church, is the chief. It has a celebrated university, 35 churches and numerous charitable institutions. The growth of the city within the last 40 years has been remarkably rapid. In 1780 the population was 42,832, in 1811, 110,460, and it is now estimated at 120,000. *Port Glasgow* is on the frith of Clyde, 20 miles below the city of Glasgow, and is chiefly dependent on it for trade. It contains 5,000 inhabitants.

Greenock, the chief seaport of Scotland, is on the frith of Clyde 2½ miles below *Port Glasgow*. It has a commodious harbor capable of containing 500 ships, and the town is extensively engaged in the foreign trade, coasting trade and fisheries. The population in 1811 was 19,042.

Paisley is a large manufacturing town, 7 miles S. by W. of Glasgow, on the river White Cart, a branch of the Clyde, which is navigable to the town for vessels of 40 or 50 tons. Paisley has long been celebrated for its manufactures, particularly for all kinds of fancy goods, in silk and cotton, goods which, for fineness and elegance, are altogether unrivalled. In 1805 the various manufactures employed 29,030 persons, and the value produced was about £1,500,000. The growth of the town within the last 40 years has kept pace with that of Glasgow. In 1782 the population was 17,700, in 1820 about 46,000.

Aberdeen, the principal city of Scotland north of the Forth, is situated on a rising ground between the rivers Don and Dee, at their efflux into the German ocean. It has a safe and spacious harbor, which has been formed at great expence, but there is a bar at the mouth which prevents the entrance of large vessels. Trade and manufactures of various kinds are actively prosecuted, and to a large extent, but the city is principally famous for its university. The population is 21,629. *Old Aberdeen*, which is on the Don about a mile to the north, is a distinct town. It contains also a university and 1,911 inhabitants.

Dundee, on the north bank of the frith of Tay, about 12 miles from its mouth, has a commodious harbor, easily admitting vessels of large burden, and furnished with a wet dock and various other improvements on an extensive scale. The inhabitants, 30,939 in number, are chiefly engaged in the linen manufacture. *Perth* is on the Tay, in an uncommonly beautiful and picturesque country, 22 miles west of Dundee. It has been the scene of many important transaction recorded in Scottish history. It contains 17,248 inhabitants. *Stirling*, often the residence of the ancient kings of Scotland, and celebrated for many bloody battles fought in its vicinity, is on the Forth, 35 miles N. W. of Edinburgh. *St. Andrews* is on the coast between the frith of Forth and the frith of Tay, 39 miles N. N. E. of Edinburgh. Population 3,300.

Universities and Academies.] The *University of Edinburgh* has long been celebrated, particularly for the eminent qualifi-

cations of its professors. As a medical school it has attained to high repute, and has long been resorted to on this account from the most remote quarters. The whole number of students attending the university in 1818 was 2,000. The library consists of more than 50,000 volumes, and there is an excellent museum of natural history. The botanic garden occupies a surface of nearly five acres.

The *University of Glasgow* had, in 1814, 16 professors and more than 1,400 students. It has a valuable and extensive library, founded upwards of two centuries ago, in which there are many very rare books, and the late celebrated Dr. William Hunter of London bequeathed to the university his whole museum, one of the most valuable collections in Europe, of natural history, paintings, medals, anatomical preparations, books, &c.

Aberdeen University is composed of two colleges, each of which is styled an university. King's college, in Old Aberdeen, had in 1817, 8 professors, 187 students, and a library of 13,000 volumes. Marischal college, in New Aberdeen, had in 1817, 10 professors, 212 students, a library of 10,000 volumes, and an observatory, a museum, and a very complete philosophical apparatus. There are more than 100 theological students, who alternately attend each university. The two institutions, however, are quite distinct and independent of each other, and some attempts for their union under one system have proved abortive.

The *University of St. Andrews* was formerly composed of three colleges, St. Salvador's, St. Leonard's and St. Mary's. The two former were united in 1747. The United college has 8 professors and usually about 140 students. St. Mary's college is merely a theological seminary, and has 4 professors and usually about 25 students. There is a library common to both institutions consisting of 36,000 volumes.

Anderson's academical institution, founded in the city of Glasgow in 1796, is handsomely endowed and has a valuable philosophical apparatus, library and museum. It is designed to afford a regular course of instruction in certain branches of science to those persons who do not intend to enter any of the universities, including the ladies; and accordingly courses of popular lectures are given on natural and experimental philosophy, on mathematics, chemistry, botany and natural history. The lectures are attended by great numbers of mechanics and manufacturers, and it may with safety be affirmed that in no city in Europe is the knowledge of chemistry and mechanics so universally diffused as in Glasgow. The *High-School* at Edinburgh, the principal grammar school of the city, is under the direction of a rector and 4 masters, and has more than 200 scholars.

Common Schools.] In no country is there more ample provision made for the education of the common people than in Scotland. In every parish a school is established by law, in which are taught reading, writing and arithmetic. The effect of this regulation has been of the happiest character; a spirit of improvement per-

vades the whole community, and a more moral, orderly, and well instructed people than the Scotch can nowhere be found.

Language.] The language of the low country is English with a mixture of the Scotch, which, however, among the better classes is fast giving way to the English, and as a spoken language is in some danger of becoming obsolete. If this should ever happen, however, some fine specimens of the dialect and manners of Scotland will still be found in her ancient poetry and songs. Ferguson and Burns have also contributed to preserve the native tongue of ancient Caledonia, and the late admirable productions by the author of *Waverley* contain such a rich store of Scotch phraseology, enlivened with such fine pictures of the Scotch character and manners, that the language, however it may be disused in ordinary discourse, cannot wholly perish. The language of the Highlanders is that species of the Celtic, called in Scotland Gaelic or Earse, which seems to be the same with that spoken by the Welch and Irish.

Religion.] Presbyterianism is the established religion; and those attached to this denomination constitute more than nine tenths of the people. This system is founded on a parity of ecclesiastical authority among the clergy, all its ministers being held equal in rank and power. It is also exceedingly simple in its forms, admitting of no outward splendor or ceremony, nor any of those aids to devotion which are supposed to be derived from painting and music. There are in Scotland 899 parishes, and 938 clergymen belonging to the established church, who discharge the duties of the pastoral office in their several parishes. They are assisted by elders, who are selected from the congregation for the propriety of their conduct; these with the minister compose a kirk-session, which is the lowest ecclesiastical judicature in Scotland. The ministers of several contiguous parishes constitute a presbytery, which has cognizance of the conduct of the clergy, and of all ecclesiastical matters within its bounds. Synods form the next gradation in the scale of ecclesiastical judicature. They are composed of several presbyteries, and of a ruling elder from every kirk-session within their bounds. They are courts of appeal, and review the procedure of the presbyteries. The general assembly consists of delegates from presbyteries, universities and royal boroughs to the number, in all, of 361. This assembly is the highest ecclesiastical court, to which all clergymen are amenable, and which judges in the last resort, in all appeals from inferior courts. This court meets annually in May, and sits ten days. The clergy are in general very moderately provided for, their stipend seldom amounting to more than a bare competence.

Manners and Customs.] The Scots are commonly divided into two classes, viz. the Highlanders and Lowlanders, differing from each other in language, manners and dress. About half a century ago the Highlanders were divided into tribes called *Clans*. The inferior orders were vassals of particular chiefs, to whom they were strongly attached, and on whom they relied for that safety,

which the laws alone were not able to insure them. The rents of the farms which the vassals occupied were inconsiderable, and paid chiefly in military service. They bestowed no more attention on the cultivation of the soil than was barely sufficient to gain a subsistence. Most of their time was wasted in indolence or amusement, unless when their chieftain summoned them to avenge, on some neighboring tribe, an insult or injury. In winter evenings, around a common fire, the youth of both sexes assembled for the song, the tale, and the dance. A taste for music was prevalent among them. Their vocal strains were plaintive and melancholy; their instrumental airs were either lively for the dance, or martial for the battle. Every family of note retained a historian, to narrate its heroic deeds and feats of valor, or a bard who sang the praises of the chieftain and his clan. They were distinguished for their hospitality. Strangers who ventured to penetrate into their fastnesses, were received and treated with cordiality and affection; but they themselves seldom went abroad except for the purpose of devastation or plunder. Their dress resembled that of the ancient Romans, consisting of a light woollen jacket, a loose garment that covered the thigh, a plaid wrapt round them in the form of a Roman toga; and a bonnet, for the head. They went constantly armed with a dirk and pistols, always ready to resist an assault, or revenge a provocation. Their religion was deeply tinged with superstition. They believed in ghosts and apparitions, and the power of the second sight or the ability of some favored individuals to foresee future events.

But the state of society in the Highlands has been greatly changed since the rebellions in 1715 and 1745. The Roman dress and the use of arms have since that time been prohibited by government; and roads have been constructed at vast expence, opening an easy communication with the low country. The chieftains are now no longer petty monarchs, and the services of their vassals are not requisite for their defence or aggrandizement. Divested of their legal authority, they now endeavor to preserve their influence by wealth, and with this view their attention is directed to the improvement of their estates. A spirit of industry has been excited among the tenants, and, in many places, arts and manufactures are encouraged. The Highland gentleman now differs very little from an inhabitant of the southern counties.

Government.] Since 1603 Scotland and England have been united under one great monarchy. In the British house of lords the Scotch nobility are represented by 16 peers. In the house of commons, the freeholders of the counties, amounting to about 2,429, are represented by 30 commissioners or knights of the shire; the royal boroughs, which are 65 in number, are divided into 14 districts, which return as many members, elected by a delegate from each borough; and the city of Edinburgh sends one member, making, together, 45. Scotland still retains her own ancient laws and judicial institutions.

Revenue.] At the time of the union of Scotland with England; the proportion of revenue furnished by Scotland to the common treasury it is supposed, was no more than one thirty sixth part of the whole; but now, at least one seventeenth of the revenue of Great Britain is drawn from Scotland. The amount in 1814 was £4,483,014.

Manufactures.] For a considerable time after the union with England, Scotland appears to have made little progress in manufactures, but about the middle of the last century a spirit of enterprise and ingenuity was excited, which has ever since continued, and has carried the country to a high degree of perfection in all the great branches of its industry. The principal manufactures are cotton goods, especially those of a finer quality. Glasgow, Paisley, and the surrounding districts, are the chief seats of the cotton manufactures. There are several great iron-works in Scotland, and that at Carron near Falkirk, 26 miles N.W. of Edinburgh, deserves particular notice, being the largest iron-manufactory in Europe. There are 20 furnaces for the various operations, which consume about 200 tons of coal every week, and the whole works employ more than 2,000 persons. All kinds of iron goods are manufactured at Carron, particularly steam-engines, cylinders, boilers, heavy ordnance, and other ponderous apparatus used in war or the arts. The whole value of the articles annually manufactured in Scotland is estimated at £14,189,136, of which cotton goods constitute £8,964,486; linen goods £1,775,000; woollen goods £450,000; and all other articles £5,000,000.

Commerce.] The commerce of Scotland consists principally in the exchange of her manufactures for the raw produce of other countries. It has very greatly increased since the middle of the last century. In 1755 the imports were 465,411 *l* and the exports 535,576 *l*. In 1810 the imports were 3,671,158 *l*. and the exports 4,470,239 *l*. having increased about eight-fold in little more than half a century. The amount of shipping in 1760 was 83,913 tons, and in 1800, 171,728 tons, manned by 14,820 men. Since 1800 it has greatly increased.

Islands.] The islands of Scotland are numerous and important, and fall naturally into three grand divisions: the Hebrides or Western islands; the Orkneys; and the islands of Shetland.

The *Hebrides* lie at various distances from the west coast of Scotland between 53° 30' and 58° 28' N. lat. and between 4° 52' and 7° 40' W. lon. They are nearly 200 in number, of which about 87 are peopled with 66,000 inhabitants. Their superficial contents exceed 2,800 square miles, or 1,792,000 acres, of which not one sixth part is cultivated. The soil in some parts is fertile, but at least two thirds of the whole is barren, and unfit for cultivation.

The names of the principal islands, beginning in the south, are, *Arran* and *Bute* in the frith of Clyde; *Islay*, on the western side of the peninsula of Cantire; *Jura*, the most rugged of all the Hebrides, separated from *Islay* on the S. W. by a narrow strait

and from the main land by the sound of Jura; *Mull*, a large island containing 350 square miles, and 9,183 inhabitants; *Icolmkill*, or *Iona*, a small island, only three miles long and one broad, but the most celebrated of all the Hebrides, having been from the beginning of the 7th century to the reformation, the residence of the regular clergy of the order of St. Columba, who from this secluded spot diffused the light of learning and religion among the savage clans of Caledonia; *Staffa*, eight miles north of Icolmkill, noted for its beautiful basaltic columns, and for one of the most surprising curiosities of nature, the vast basaltic cavern called Fingal's cave or grotto; *Tiree* and *Coll* lie N. W. of Mull. *Skye*, the largest of all the Hebrides, contains 18,000 inhabitants, and more than 500 square miles, of which not one tenth is arable. *Lewis*, the most northerly of the Hebrides, is nearly as large as Skye but contains only half as many inhabitants. *North Uist* and *South Uist* lie to the south of Lewis.

The ORKNEYS lie between $58^{\circ} 3'$ and $59^{\circ} 45'$ N. lat. and between $2^{\circ} 0'$ and $3^{\circ} 14'$ W. lon. They are separated from the northern coast of Scotland by Pentland Frith, a strait about 11 miles broad. The number of the islands is 67, of which 29 are inhabited. The whole group may contain 600 square miles or 384,000 acres, of which about one quarter is productive land, and yields more than enough for the support of the inhabitants. Among the animals are a small but spirited breed of horses, about 50,000 sheep, and a large number of swine. The population in 1811 was 24,693.

Pomona, or *Mainland*, the principal island, near the centre of the group, is about 30 miles long and contains more than 200 square miles. Kirkwall, the chief town, has an excellent harbor with considerable trade and a population of 2,621. The other principal islands are *Hoy* and *Waes* which lie to the S. W. of Pomona, and at low tide form one island; *South Ronaldshay*, lying E. of Hoy; *Shapinsay*, *Stronsa*, *Eday*, *Sanday*, *North Ronaldshay*, *Papay Westray*, *Westray*, and *Rowsay*, which lie to the N. and N. E. of Pomona.

The SHETLAND ISLANDS lie about 18 leagues N. E. of the Orkneys, between $59^{\circ} 46'$ and $61^{\circ} 11'$ N. lat. Like the Orkneys they consist of one principal island, and numerous smaller ones, of which 17 are inhabited. The soil is in general barren, and has a peculiarly wild, dreary and desolate aspect, yet it is computed that there are about 25,000 acres of arable land, and 23,000 of good meadow and pasture. The climate is variable, and disturbed with rains and thick fogs. Storms are also frequent, and for five or six months of the year the sea swells and rages in such a manner that the islands are almost inaccessible. The inhabitants have several vessels engaged in the fisheries, the produce of which forms the principal article of export. The population in 1811 was 21,470.

Shetland or the *Mainland*, the principal island, is 60 miles long, and on an average 12 broad, and contains upwards of 14,000 inhabitants. Lerwick, the capital, is on the east coast, and is noted for its convenient harbor, called Bressay Sound, where vessels

may safely ride at all seasons. It is a trading town with 1,400 inhabitants, and is the rendezvous of fishing vessels from various countries. *Yell* and *Unst* lie to the north of the Mainland, and are next to it in size and population. The other islands are small and thinly inhabited.

IRELAND.

Situation and Extent.] Ireland is bounded on the E. by St. George's channel, which separates it from Great Britain, and on all other sides by the Atlantic ocean. It lies between $51^{\circ} 25'$ and $55^{\circ} 22'$ N. lat. and between $5^{\circ} 20'$ and $10^{\circ} 20'$ W. lon. Its greatest length is about 300 miles, and its greatest breadth 160. The area is estimated at 32,000 square miles, or 20,480,000 acres. In shape Ireland resembles a diamond, or an oblique-angled parallelogram, with its longest diameter pointing to the N. E. and S. W.

Divisions.] Ireland is divided into four provinces, viz. Ulster, in the N. E.; Connaught, in the N. W.; Leinster, in the S. E. and Munster in the S. W. These provinces are subdivided into the following 32 counties, which are again divided into 3,436 parishes.

<i>Counties.</i>	<i>Counties.</i>
1. Donegal.	17. Longford.
2. Londonderry.	18. Westmeath.
3. Antrim.	19. Dublin.
4. Tyrone.	20. King's county.
5. Fermanagh.	21. Kildare.
6. Monaghan.	22. Queen's county
7. Armagh.	23. Wicklow.
8. Down.	24. Carlow.
9. Caven.	25. Kilkenny.
10. Leitrim.	26. Wexford.
11. Sligo.	27. Clare.
12. Mayo.	28. Tipperary.
13. Galway.	29. Waterford.
14. Roscommon.	30. Limerick.
15. Louth.	31. Cork.
16. Meath.	32. Kerry.

The nine first named are in Ulster, the five next in Connaught, the twelve next in Leinster, and the six last in Munster.

Bays and Harbors.] The coast is deeply indented, especially on the west and north, and the bays and harbors are very numerous. The most important on the southern coast are Waterford and Cork harbors; on the S. W. Bantry and Dingle bays; on the W. the estuary of the Shannon, and the bay of Galway; on the

N. W. Donegal bay, of which the bay of Sligo forms a part ; on the N. are Lough Swilly and Lough Foyle. On the eastern coast there are none possessed of great natural advantages ; yet from the greater improvements of the adjoining country, and the vicinity of England, there are many which are much frequented, especially the Belfast and Carlingford bays, and the harbors of Drogheda, Dublin and Wexford.

Capes.] The remarkable capes and headlands are Malinhead, the most northerly point of the island ; Fairhead, at the N. E. extremity ; Clogher head, on the eastern coast, a little N. of Drogheda ; Howth head, the north point at the entrance of Dublin bay ; Wicklow head, near the town of the same name ; Carnsore point, at the S. E. extremity of the island ; Cape Clear, on an island at the southern extremity ; Mizen head, at the S. W. extremity ; and Kerry head, the south point at the mouth of the Shannon.

Rivers.] The *Shannon* is much the largest river. It rises in the N. W. part of the island, in a small lake, near the head of the bay of Sligo, and runs in a southerly direction to the centre of the island, where it turns, and runs to the S. W. till it reaches Limerick, after which its course is nearly west till it falls into the Atlantic ocean, 60 miles below that city. It is navigable nearly to Limerick for ships of the greatest burden, and for small vessels throughout its whole course ; and if a canal of only four miles in length were cut from the lake in which it rises to a small river which falls into Sligo bay, it would open a navigable communication from the northern to the western coast through the centre of the island. In various parts of its course the Shannon expands into lakes of a considerable size, the principal of which are Lough Ree and Lough Derg.

The other important rivers, beginning in the S. W. are the *Lee*, which passes by the city of Cork, and falls into Cork harbor 15 miles below ; the *Blackwater*, which, after a course of 60 miles, falls into the sea at Youghall, near the middle of the southern coast ; the *Barrow*, which rises about 40 miles west of Dublin, and pursuing a southerly course receives from the west the Nore and the Suire, and falls into Waterford harbor ; the *Slaney*, a small river, the mouth of which forms Wexford harbor ; the *Liffy*, on which the city of Dublin stands, a small river, and of no use for inland navigation, on account of the falls near its mouth, and the numerous shallows and rapids with which it abounds ; the *Boyne*, which rises near the source of the Barrow, and flowing N. E. passes by Drogheda, and falls into the sea four miles below ; the *Bann*, which rises near the eastern coast, a little north of Carlingford bay, and running N. W. falls into the southern side of Lough Neagh, and issuing again from the northern side of the lake, continues its course in a N. W. direction, and passing by Colerain, falls into the sea four miles below ; and lastly, the *Foyle*, which passes by Londonderry and expands into the spacious bay called Lough Foyle.

Lakes.] The lakes of Ireland are numerous, especially in the west and north. The term *Lough*, corresponding with the Scot.

safe, particularly in winter, owing to its great exposure to the winds from the east and south-east. To remedy this defect a strong wall of hewn stone has been built, 30 feet broad and nearly five miles long, extending directly into the bay, and terminated by a handsome light-house. It was begun in 1748, and finished within 7 years. The river Liffy, from the point where it enters the bay, is embanked on both sides with a noble wall of freestone, forming a range of beautiful and spacious quays through the whole city, uninterrupted by any building whatever nearer to its sides than the breadth of a wide street, for nearly 3 miles. The river is crossed in its course through the city by six stone bridges, of which five are modern, and built in a handsome style of architecture.

The old part of the city is irregularly built, but that portion erected within the last 50 years, which is the most considerable, is laid out in broad streets with spacious and beautiful squares. The houses are generally brick, and from three to five stories high. There is perhaps no city which, in proportion to its size, can boast of a greater number of magnificent buildings. Among the public edifices are the castle, which occupies the centre of the city; the Royal exchange; the Commercial buildings; the Linen hall, a vast and massy pile of buildings forming the magazine for this staple manufacture of Ireland; the custom house, a most magnificent structure, finished in 1790 at an expence of £255,000; Trinity college; and a splendid obelisk, 210 feet high, recently erected on an eminence at the west end of the city in honor of the duke of Wellington. The commerce of Dublin is very extensive, the amount of import duties alone paid at the custom house in 1817 was £945,000, a sum nearly as great as that of all the other ports in Ireland, together. The population is 187,939. The country around the bay of Dublin rises gradually on all sides from the shore, and is covered with a vast number of villas and villages, which produce a fine effect when viewed from the metropolis; and this, together with the beauty of the bay itself, which has frequently been compared with that of Naples, the mountains in the vicinity, and the peculiarly picturesque summits of those of Wicklow in the back ground, render the whole prospect strikingly beautiful.

Cork, the second city in Ireland, is 126 miles S. W. of Dublin. The principal part of the town is situated on an island formed by the river Lee, which divides into two branches a little above the town and unites again a little below it, encompassing a considerable extent of ground. The suburbs extend along the opposite banks of both branches, and are united with the rest of the town by several bridges. The public buildings are very plain in their appearance and the houses generally are far from elegant. The commerce of the town consists principally in the exportation of salted provision, butter, tallow and hides, and it is computed that 100,000 head of cattle are slaughtered and salted in a single season. Cork stands about 15 miles from the sea, and its harbor, at the Cove of Cork, nine miles below the town, has long been

celebrated for its safety and capaciousness. The entrance is deep and narrow, and defended by a strong fort on each side, and large sums have been lately expended in fortifying two islands, which command the entrance. The population of Cork is estimated at 90,000.

Limerick, the third city in Ireland, is 94 miles S. W. of Dublin, on the Shannon, 60 miles from its mouth. A part of the town is on an island formed by the Shannon, and was formerly fortified, and esteemed one of the strongest places in Ireland, but the walls are now demolished. The commerce of the town is considerable, and the exports consist principally of beef and other provisions, and the imports are rum, sugar, tobacco, timber, wine, salt, &c. The population is about 50,000.

Belfast is 80 miles N. of Dublin, on the west side of the small river Lagan, at its entrance into Belfast Lough or Carrickfurgus bay. It manufactures large quantities of linen and cotton goods, and has extensive commerce, particularly with the West Indies and America. The value of the exports, which consisted principally of linen, beef, pork and butter, amounted in 1810 to nearly £3,000,000. The progress of Belfast in population and commerce has been remarkably rapid. In 1782 the population amounted to only 13,000, while in 1816 it was computed at 30,000. The custom-house duties in 1800 were only £62,663 and in 1816, £349,417.

Among the other important towns are the following. *Galway* is on the north side of the bay of Galway, at the mouth of the short stony river which forms the outlet of Lough Corrib, and contains 12,000 inhabitants. *Sligo* is at the mouth of a small river which falls into the head of the bay of Sligo and contains 10,000 inhabitants. *Londonderry* is pleasantly situated on the west bank of Foyle river near its entrance into Lough Foyle. It has an extensive commercial intercourse with the West Indies and America, and contains 18,000 inhabitants. *Newry*, 30 miles S. S. W. of Belfast, on Newry water which falls into Carlingsford bay, has 15,000 inhabitants and considerable manufactures and commerce. *Drogheda* is situated on both sides of the Boyne, a few miles from its mouth. It contains 15,000 inhabitants, and carries on considerable trade in the exportation of large quantities of corn, and in the importation of coals and other heavy commodities, which are carried up the river and distributed through the interior, by means of a canal. *Wexford*, at the mouth of the Slaney, 60 miles S. of Dublin, has considerable woollen manufactures and a population of 9,000. The harbor is spacious, but not deep enough for large vessels. *Waterford* is on the Suir which soon after joins the Barrow, and forms the bay called Waterford harbor. It has considerable commerce, and packet-boats sail regularly to and from Milford-Haven. The population is 35,000.

Canals.] The Grand canal connects the river Shannon with Dublin bay. It commences on the Shannon, about half way between lake Ree and lake Derg, and terminates in the city of

Dublin, in a wet dock on the south side of the Liffy. Another canal connects Dublin with the river Boyne: it terminates in a wet dock on the north side of the Liffy. Both these canals are navigated by boats of 60 tons burden. In the N. E. part of the island there are two canals; one opening a communication between Lough Neagh and Belfast bay on the east, and another connecting the same lake with Carlingford bay on the south.

Education.] Trinity college in Dublin is the only university in Ireland. It was founded by queen Elizabeth, and consists of a provost, 25 fellows, and 70 scholars. There are 13 professors, and in 1818 the number of students was 1209. Attached to the university are a printing office, an anatomy house, an observatory, and a library of 68,946 volumes. The education of the lower classes has been almost entirely neglected. Within a few years, however, societies have been formed by the benevolent in Great Britain for the establishment of schools in Ireland, and their efforts have been attended with much success. In 1817 there were 27,000 children receiving instruction in the schools of the Hibernian society.

Government.] Since 1800 Ireland has been inseparably united with Great Britain, and the two countries are styled the United Kingdom of Great Britain and Ireland. Ireland sends 100 representatives to the house of commons, and 28 members to the house of lords as the representatives of the Irish peerage, besides five spiritual lords.

Religion.] The established religion is that of the church of England; but it is computed that three fourths of the people are Catholics, and of the remaining fourth about one half are Presbyterians. The Catholics were formerly very severely oppressed, being deprived of every civil privilege, and subjected to various penalties, on account of their religion. This system of intolerance is now considerably mitigated. The Catholics have been long freed from all penalties in consequence of their religion, and the road to civil and military distinction has been opened to them, with some reservation of the higher offices.

Population and Character.] The population of Ireland has about doubled within the last 70 years. In 1754 it was 2,372,634, and at present it is estimated at more than 4,500,000. The manners of the superior classes in Ireland very much resemble those of the English. The Irish gentry seldom devote themselves to literature or science, but amuse themselves with hunting and other robust exercises. Hence an overflow of health and spirits; and the observation of an able writer that Ireland produces the stoutest men, and the finest women in Europe, must not be confined to the inferior classes. The Irish peasantry are, in general, sunk in poverty and ignorance. They are lodged in miserable mud hovels with one door, and frequently without either window or chimney. They go almost naked, and their food consists almost entirely of milk and potatoes. These remarks apply to the southern part of the island; the north of Ireland, having been

planted by colonies of the English and Scotch, the institutions and manners of all classes of the people resemble those of the parent countries.

Manufactures and Commerce.] The manufacture of linen is the staple branch of Irish industry, but the cotton manufacture is spreading very rapidly, and the distillation of spirits has long been carried on to a great extent. The principal exports are linen, corn, butter, provisions, hides, and whiskey. The value of the exports in 1816 was £6,703,799, and of the imports £5,084,890. The number of vessels belonging to Ireland is about 1,200, navigated by between 5,000 and 6,000 sailors.

Natural Curiosities.] The Giants Causeway is the most remarkable curiosity in Ireland. It consists of a surprising collection of basaltic pillars on the northern coast, about eight miles N. E. of Coleraine. It projects into the sea to an unknown extent, but the part explored is about 600 feet long and from 120 to 240 broad. The pillars are mostly in a vertical position, and their height is from 16 to 36 feet above the level of the strand: in some places, for a considerable space, they are of an equal height so as to form a level pavement. They are usually from 15 to 24 inches in diameter, and are rarely composed of one entire piece, but consist of short or long joints with the surfaces where they meet either flat, or concave with convex corresponding. The form of the pillars is very various; sometimes it is square, sometimes three-sided, sometimes hexagonal and often heptagonal, but the most numerous are pentagonal.

The lake of Killarney is remarkable for its picturesque scenery, and for several natural curiosities. It is about 10 miles long and from one to seven broad, and is divided into three parts, called the Lower, Middle and Upper lakes. The shores of the Lower lake are diversified with the most beautiful scenery, and on the south side are lofty mountains, from one of which O'Sullivan's cascade falls into the lake with a tremendous roar, opposite the romantic island of Innisfallen, the seat of an ancient noted abbey. In the Middle lake is the celebrated rock called the Eagle's Nest, a place wonderful for its echoes; the sound of a bugle horn producing tones equal to 100 instruments, and the discharge of a musket causing a succession of peals equal to the loudest thunder. The Upper lake is entirely surrounded by mountains, and near the summit of one of them is a circular lake, called the Devil's Punch Bowl, which, from its immense depth and continual overflow of water, is considered as one of the principal curiosities of Killarney. After heavy rains the water falls down the side of the mountain in the form of a beautiful cascade.

NORWAY.

Situation and Extent.] Norway is bounded W. and N. by the Atlantic ocean; E. by Russia and Sweden; and S. by the Skager Rack. It extends from the Naze in lat. 58° N. to the North cape in lat $71^{\circ} 11'$ N. The breadth of the country is very different in different parts. The part below the parallel of $62^{\circ} 30'$ N. lat. is much the broadest, forming a compact territory 350 miles long by 250 broad. The part of the country lying north of this parallel is a long narrow territory included between the mountains and the sea. The number of square miles in Norway is estimated at 161,000.

Divisions.] Norway is divided into five governments or dioceses, viz. Aggerhuus or Christiania, in the S. E.; Christiansand in the S. W.; Bergen in the W.; and Drontheim and Nordland, long narrow provinces, in the N.; to which may be added Finmark or Norwegian Lapland, a dreary and inhospitable region, lying still farther north. The extent and population of these divisions are given in the following table :

<i>Divisions.</i>	<i>Extent in sq. miles.</i>	<i>Population.</i>	<i>Pop. on a sq. m.</i>
Aggerhuus,	37,327	390,000	10
Christiansand,	14,877	140,000	10
Bergen,	14,356	150,000	10
Drontheim	22,858	170,000	8
Nordland and Finmark, }	71,582	80,000	1
Total,	161,000	930,000	6

Sea Coast.] The coast of Norway stretches in a long line from S. W. to N. E. and is deeply indented with bays and creeks. It presents also a succession of islands of various sizes, some of which are barren and uninhabited, and others contain tolerable pasture, and many of them afford convenient stations for the fisheries. The shore of Norway is often bold, and the sea of great depth in the immediate vicinity of the rocks.

Mountains.] The great Scandinavian range passes, under various names, through the whole extent of this country from N. E. to S. W. Above the parallel of $62^{\circ} 30'$ N. lat. it forms the boundary between Norway and Sweden. Below that parallel its course lies wholly in Norway; and here it proceeds at first in a westerly direction under the name of the Dofrafield mountains, forming the boundary between the governments of Aggerhuus and Drontheim, and approaching very near to the western coast: it then turns to the south, and under the name of the Langfield mountains, divides the government of Aggerhuus from that of Bergen, and

passing through Christiansand, terminates abruptly at the southern extremity of Norway in a lofty precipice. The highest summit of the whole range is near lat. 68° N.; the highest of the Dofrafield mountains is 4,297 feet above the level of the sea. These summits and numerous others are covered with perpetual snow and ice. There are passes across the mountains in various places, some of which are narrow and dangerous; that of Fillafeld under 61° N. lat. is rich in romantic prospects.

Rivers and Lakes.] The rivers of Norway are numerous, but short and rapid. The mountains every where approaching near to the coast, the rivers descend from them like torrents directly and impetuously into the sea. Owing to the rocks with which they abound they are generally unfit for navigation. The *Glommen*, the largest river in Norway, falls into the Cattegat at Fredrickstadt, after a southerly course of about 300 miles. It is full of shoals and cataracts which completely obstruct the navigation. The *Drammen* falls into the gulf of Christiania on the west side. The lakes in the southern part of the country are numerous but many of them are mere expansions of the rivers.

Face of the Country.] The surface of Norway is very uneven, presenting a succession of mountains and vallies, the former in general barren, and uninhabited; the latter not deficient in the productions of a high latitude. The scenery is striking from its grandeur and sublimity, but seldom pleasing from the softer beauties. Vast forests, lofty mountains, rocks, precipices and water falls, and at times a picturesque valley, are the objects which here present themselves to the traveller.

Climate.] In the interior, near the high mountains which form the eastern frontier, the cold of winter is intense, but the atmosphere is serene and healthy. On the sea coast the climate is materially different, being softened by the western breeze, and is often less cold in the depth of winter than the interior of Germany. The bays along the coast are seldom frozen, the open sea never. This, however, is the region of fog, rain and high wind. In summer the length of the day counterbalances the shortness of the warm season, and corn ripens with uncommon rapidity. In Nordland and Finmark, the sun remains above the horizon for several weeks successively, and in winter is invisible for a corresponding interval; the dreariness of the latter, however, is lessened by the coruscations of the aurora borealis, and the brightness of the snow, which furnish light sufficient for ordinary purposes.

Soil and Productions.] The soil of Norway is generally stony and barren, though in the southern provinces there are some tracts of considerable fertility. The country does not yield corn enough for the support of its inhabitants, about one fourth part of all that is consumed being imported from foreign countries. In places remote from the coast the inhabitants live on coarse fare, and are accustomed, in seasons of scarcity, to lengthen out their scanty stores by mixing pine bark with their bread. Flax and hemp are raised in many parts of the country; in others barley

and oats. It is computed that not more than one hundredth part of the kingdom is under tillage; the pastures, however, are extensive, and cattle in considerable numbers are raised for exportation. The mountains are covered with forests of pine, ash, and fir, and these are the most important natural productions; timber having been for many ages the principal article of export from Norway.

Chief Towns.] *Christiania*, the capital, is situated in a fertile valley at the bottom of a gulf of the same name, in the province of Aggerhuus. This gulf penetrates above 50 miles into the interior of the country, and is filled with rocky islands which, however, do not interrupt the navigation. The harbor is excellent, and vessels of the largest size ascend to the wharves. The town, though not large, is the best built and most thriving place in the kingdom, having regular streets, neat stone houses and about 9,000 inhabitants.

Bergen, the largest town in Norway, lies at the bottom of a long bay, which is inclosed on all sides by rugged and barren rocks. While it has thus from its situation the advantage of a secure harbor, the access is attended with considerable danger. The rise of the commerce of this place is to be dated from the year 1445, when the German Hanse towns established here a factory and ware houses. In process of time they came to exercise a sort of authority over the inhabitants; and though this has long ceased to exist, there is still at Bergen a company of about 17 German merchants in correspondence with Bremen, Lubeck and Hamburgh. The trade consists in the export of fish, fish-oil; timber, tar, tallow and hides, and the import of corn and foreign merchandise. The population is 18,000.

Drontheim is 235 miles N. E. of Bergen on a large bay or arm of the sea at the mouth of the Nid. The harbor is perfectly safe, but the entrance is hazardous on account of concealed rocks. It has considerable trade, and the principal exports are copper, iron, timber and fish. The population in 1814 was 8,832.

Christiansund is on the southern coast opposite several small islands, the principal of which is Flekkerøen. The harbor is one of the safest in Norway, and between the island of Flekkerøen and the shore there is a road several miles in length where there is good anchorage. The town was founded by Christian IV. of Denmark, in 1641, with the view of making it the principal station of his navy. The inhabitants, about 5000 in number, carry on some trade in timber, but their principal employment is in building and repairing vessels.

Rorås, celebrated for its copper mines, is 67 miles S. E. of Drontheim, on a high mountain which is covered with snow almost the whole of the year. *Kongsberg*, 36 miles west of Christiania, was formerly celebrated for its rich silver mines, but they are now unproductive. *Skien*, 38 miles S.S.W. of Christiania, has productive mines of iron and copper. *Frederickshall* is on the frontier of Sweden, 52, miles S. S. E. of Christiania. On a rock which overhangs the town is the almost impregnable fortress of

Fredericksteert, rendered memorable by the death of Charles XII. of Sweden, who was killed in the trenches during a siege.

Minerals.] The most valuable minerals are iron and copper. The value of the iron annually produced is estimated at about £150,000: it is in general of a good quality, though not equal to that of Sweden. The copper is of very superior quality, and the chief mines of it are at Roraas. There is a salt-work near Tonsberg, on the west side of the gulf of Christiania, which produces about 20,000 tons of salt a year.

Animals.] The Norwegian horses are small but hardy; the horned cattle are likewise diminutive, but are readily fattened. Goats are more common than sheep. In Norwegian Lapland, the reindeer forms the principal wealth, and almost the only source of the subsistence of the inhabitants. Attempts are now making to rear this useful animal in the southern provinces. Aquatic fowl are so numerous that bird-catching has become a regular employment, and affords support to several thousands of the inhabitants.

Population.] The population, consisting of 930,000, is principally confined to the southern part of the country. In the three southern provinces there are more than 10 to a square mile; in Drontheim nearly eight, and in the bleak regions of the north but little more than one.

Religion.] The Lutheran is the established religion, and the great body of the inhabitants are of this persuasion. The country contains five bishoprics corresponding with the five governments. The bishoprics are divided into districts under the care of provosts, and these districts are subdivided into parishes. Where the parish is large it contains, besides the principal church, one or more chapels of ease, under the care of chaplains. There are in the whole country 49 provosts, 329 parish priests, and 92 chaplains.

Education.] There is at Bergen a university on a small scale, for teaching the classics, mathematics and philosophy; and there are several academies or higher schools maintained at the expence of the government. Each parish is provided with two or three schools, where children are taught reading, writing, and arithmetic.

Character.] The Norwegians are tall, well formed, robust, and brave, and make excellent soldiers and sailors. They possess hospitality and simplicity, and are in general accustomed to live in a very plain style, both as to diet and dwelling. The ancient habits and character of the people are much better preserved in the secluded vallies of the interior, than in the towns along the coast, where there has been a mixture of settlers from Denmark and Germany, and a considerable commercial intercourse with these countries, as well as with Britain and Holland. Even the Norwegian language has, in the seaports and among the upper ranks, been in general supplanted by the Danish.

Government.] Norway formerly belonged to Denmark, but in 1814 Denmark was compelled to transfer it to Sweden. It is

however to a considerable extent an independent kingdom, preserving its ancient constitution and laws, and having a separate assembly or diet, a separate treasury, and separate army. The union with Sweden consists simply in its being permanently governed by the same king.

Revenue, Army and Navy] The annual revenue is usually about \$1,500,000. The army consists of 12,000 regular troops, besides militia. The navy is on a very small scale, containing only six brigs, eight schooners, and about 100 gunboats.

Fisheries.] The fisheries are extensive, and may be considered, after timber and iron, the chief support of the export trade. The herring and cod fisheries are the principal branches, and give employment to many of the poor inhabitants along the coast. Salmon are likewise caught in great numbers in the lakes and rivers.

Manufactures and Commerce.] Norway, like other poor and thinly peopled countries, has scarcely any manufactures, the only works entitled to that name being the forges, foundries, glass-houses, potash refineries, and saw-mills, which owe their existence principally to the abundance of wood. The principal imports are manufactured goods of various descriptions, groceries, wine, and corn. The exports are timber, iron, copper, fish and oil, potash and glass, also cattle, hides and tallow. The commerce is principally with England, Holland and Denmark. The shipping belonging to Norway amounts to nearly 100,000 tons, and the number of seamen is about 10,000.

Natural Curiosity.] The *Malstrom*, or *Moskoe-strom*, is a remarkable whirlpool near the little island of Moskoe, one of the Loffoden islands, in about lat. 68° N. It is occasioned by the very rapid ebb and flood of the sea between Moskoe and a neighboring island. About a quarter of an hour, at high and low water, it is quiet. But when the tide is rising or falling, and especially when the N.W. wind blows in opposition to the tide, the sea boils with the most violent agitation; its roar is heard at the distance of many leagues, and the force and extent of the vortex is so great, that ships three miles off are sometimes forced towards the centre and finally dashed in pieces against the bottom. Whales are frequently absorbed by it in spite of their endeavours to escape.

SWEDEN.

Situation and Extent.] Sweden is bounded on the N. by Norway; on the E. by Russia and the Gulf of Bothnia; on the S. E. and S. by the Baltic sea; and W. by the Sound, the Cattegat and Norway. It extends from 55° 20' to 69° 30' N. lat. being about 1,000 miles long from north to south, and containing according to Hassel 186,433 square miles.

Divisions.] Sweden is divided into 24 *lans* or provinces, as in the following table. The extent and population in 1800 are annexed to each province.

		<i>Sq. miles.</i>	<i>Popu- lation.</i>	<i>Pop. on a sq. m.</i>
I. Sweden Proper,	-	40,722	654,000	16
<i>Provinces.</i>				
1. Stockholm city, }				
2. Stockholm land, }	- -	2,832	171,797	60
3. Drottingholm, }				
4. Upsal, - - - -	- -	2,430	81,131	33
5. Nyköping, - - - -	- -	2,977	96,547	32
6. Westeras, - - - -	- -	2,882	86,583	30
7. Orebro, - - - -	- -	3,872	95,025	24
8. Stora Kopparberg, }				
or Fahlun, }	- -	25,696	122,624	5
II. Gothland,	- - -	42,086	1,454,000	34
9. Gottenburg, - - - -	- -	1,892	116,674	62
10. Elfsborg, - - - -	- -	5,434	152,937	30
11. Halmstad, - - - -	- -	2,024	71,599	35
12. Christianstad, - - - -	- -	2,310	116,681	50
13. Malmöhus, - - - -	- -	1,804	142,056	78
14. Skaraborg, - - - -	- -	3,190	135,695	42
15. Linköping, - - - -	- -	4,510	158,057	35
16. Jonköping, - - - -	- -	4,400	114,480	26
17. Kronoberg, - - - -	- -	3,608	87,604	24
18. Kalmar, - - - -	- -	4,048	129,548	32
19. Bleking or }				
Carlsrona, }	- - -	1,127	62,402	55
20. Carlstad, - - - -	- -	6,578	135,438	20
21. Gothland or }				
Wisby, }	- - -	1,078	31,291	29
III. Norland and Lapland,	-	106,304	239,132	2
22. Gefleborg {				
including {				
Gestríkland, }		12,430	83,260	7
Helsingland, }				
Herjedalen, }				
23. Hernösand {				
including {				
Medelpad, }		26,576	84,500	3
Jamtland, }				
Angermanland }				
25. Umea {				
including {				
West Bothnia, }		67,298	71,372	1
Asele Lapmark, }				
Umea Lapmark, }				
Pitea Lapmark, }				
Lulea Lapmark, }				

Face of the Country.] The coast is indented by numerous inlets, and is every where lined with a succession of small islands and rocks, which render the navigation very difficult and dan-

gerous. The principal chain of mountains is that elevated range which divides Sweden from Norway and from which numerous inferior ridges proceed towards the S. E. The whole country is diversified with extensive lakes, large transparent rivers, wild cataracts, gloomy forests, verdant vales, stupendous rocks and cultivated fields.

Lakes.] The lakes are very numerous in all parts of Sweden. Of these the most important are, 1. *Malar lake*, which is about 60 miles long and from 20 to 30 broad, and communicates with the Baltic at Stockholm. It is said to contain upwards of 1200 islands, great and small. 2. The lake of *Hielmar*, lying southwest of lake Malar and communicating with it by a rapid torrent. It is 40 miles long but of small width. 3. *Lake Wetter*, lying southwest of Hielmar lake, is 80 miles long but seldom more than 12 broad, and discharges its waters through the river Motala into the Baltic. 4. *Lake Wener*, lying N. W. of lake Wetter, is the largest of all, being 80 miles long and in some places 50 broad, and discharges its waters through the river Gotha into the Cattegat.

Rivers.] The largest rivers in Sweden are called Elbs or Elfs. *Gotha Elf*, the outlet of lake Wener, leaves it at its S. W. extremity, and pursuing a course W. of S. for 70 miles discharges itself into the Cattegat by two mouths, several miles apart. Soon after leaving lake Wener it forms the famous cataracts of Trollhala. Numerous rivers fall into lake Wener, the most considerable of which is *Clara Elf*, which rises in Norway, in lake Foemund, a little south of the Dofrafield mountains, and pursuing a southeasterly course of about 280 miles discharges itself into lake Wener at Carlstad. The Gotha Elf is frequently considered as merely a continuation of the Clara Elf. The *Motala*, the outlet of lake Wetter, flows in an easterly direction, and passing by Norkoping, falls into the Baltic after a course of 65 miles.

The *Dal* is formed by two branches, both of which rise in the mountains on the borders of Norway, near lat. 62° N. It falls into the gulf of Bothnia about ten miles east of Gefle, after a circuitous course of more than 250 miles. Near its mouth is a celebrated cataract, esteemed little inferior to that of the Rhine at Schaffhausen, the breadth of the river being nearly a quarter of a mile, and the perpendicular height of the fall between 30 and 40 feet. There are numerous other rivers north of the Dal, which rise in the mountains on the western boundary and pursue a southeasterly course to the gulf of Bothnia. They are generally rapid in their course and incapable of navigation. The names of the most important, beginning in the south, are the *Angerman*, the *Umea*, the *Pitea*, the *Lulea*, and the *Tornea*.

Canal.] There is a canal around the cataracts of Trollhala in the river Gotha, which overcomes a fall of 130 feet. It is a mile long, 22 feet broad, and 9 feet deep, and in some parts is cut through the solid rock. This important undertaking, which was completed in 1800, opens a safe and commodious water commu-

bication from Gottenburg to the extensive country around lake Wener. It is the intention of the Swedish government to prolong this line of navigation through the Wetter and several other lakes to the eastern coast, thereby forming a direct communication between the Baltic and the German ocean, passing through the centre of the kingdom.

Roads.] Great attention has been paid by the government to the roads of Sweden. Though not so broad, they are as good as the English turnpikes. The traveller journeying many thousands of miles, and in every direction, will scarcely find one that deserves the name of indifferent. They are made with stone and gravel, yet no toll is exacted. Each landholder is obliged to keep a part in repair, proportioned to his property.

Climate.] The different parts of Sweden present considerable varieties of temperature; but even in the middle regions winter maintains a long and dreary sway. The gulf of Bothnia becomes one field of ice, and travellers pass over it regularly to Russia. In the most southern provinces, where the mass of the population is centered, the climate may be compared to that of Scotland, which lies under the same parallel; but the western gales from the Atlantic, which deluge the Scottish Highlands with perpetual rain, and form the chief obstacle to improvement are here little felt. In the north the summer is hot from the great length of the days, and vegetation arrives quickly at maturity. At Tornea, the sun is for some weeks visible at midnight; and the winter in return presents as many weeks of complete darkness. Yet these long nights are relieved by the light of the moon, by the reflection from the snow, and by the Aurora Borealis, or northern lights, which dart their ruddy rays through the sky with an almost constant effulgence.

Soil and Productions.] The soil of many parts of the northern districts is so full of stones and rocks, that there is scarcely room for a tree to take root, but in the vallies and plains, wherever the climate permits, it is quite productive. The southern provinces are the most fertile, and agriculture is here conducted with much skill and industry. The quantity of corn raised in the country is not sufficient for the consumption of its inhabitants. It is estimated that 6,400,000 tons are annually produced, and 400,000 tons imported. The quantity of flax and hemp also is not enough for the supply of the country, but of hops there is a superabundance. The immense forests which spread over the mountains yield excellent timber for masts and other purposes, and an abundance of tar and turpentine.

Minerals.] The principal mineral production is iron, and Swedish iron has long been celebrated as the best in the world. The mine of Dannemora, in the province of Upsal, is particularly celebrated for the superiority of the metal, which in England is called Oregrund iron, because it is exported from Oregrund, an adjacent port. The mine yields annually more than 4,000 tons of metal, and employs about 1200 persons. The chief copper mines are in the province of Stora Kopparberg near the town of Fahlun.

Sweden also produces lead, silver and gold, though not in large quantities.

Chief Towns.] *Stockholm*, the capital of Sweden, is situated at the junction of lake Malar with an inlet of the Baltic. The form of the town is an irregular oblong, extending from north to south, while the waters cross it in two channels from east to west. The situation is extremely picturesque, as well on account of the lake and harbor, and the numerous islands which they contain, as from the unevenness of the surrounding country, which rises in some places in gentle eminences, and at others in abrupt rocks. Stockholm is generally described as standing on seven islands, but several of them are very small and contain only forts or buildings for naval purposes. The harbor is perfectly safe and sufficiently capacious to receive a thousand ships, and the largest of them may come close to the quays. It has, however, some disadvantages arising from the number of small islands and rocks at the mouth of the inlet from the Baltic, and from the delay occasionally experienced in coming up a winding channel from the sea, a distance of more than 20 miles. Stockholm is the commercial emporium of the central part of Sweden. Its connection with the interior is very extensive by means of lake Malar and various rivers and canals united with it. The town is well built, and contains 13 bridges, 22 churches, and numerous other public buildings, some of which are in a fine style of architecture. The population in 1815 was 73,000.

Gottenburg is a large and thriving town in the southwest of Sweden, near the mouth of the Gotha Elf. It stands in a marshy plain, surrounded by precipitous ridges of naked rocks, rising to the height of from 100 to 300 feet. The town is built partly on the plain and partly on the declivity of one of the ridges. In the lower part of the town the houses are all built on piles; the streets here cross each other at right angles, and several of them are traversed by canals bordered with trees. The upper town is built with less regularity, but it has an imposing appearance, the houses rising one above another in the form of an amphitheatre. The harbor is formed by two long chains of rocks, about a quarter of a mile apart, and is defended by a fort on a small rocky island at the entrance. As a commercial and manufacturing town, Gottenburg ranks next to Stockholm, and it is more conveniently situated for foreign trade than any other place in Sweden. It is the seat of the Swedish East India Company, which has the exclusive privilege of importing East India commodities into the kingdom, and its commercial connections extend to all parts of Europe, to America, and the West Indies. The herring fishery was formerly carried on to a great extent, and there are several vessels engaged in the whale fishery. The amount of shipping is about 17,000 tons. The population in 1815 was 21,000.

Carlscrona, in the province of Blekingen, 220 miles S. S. W. of Stockholm, is the principal station of the Swedish navy. It is built on five rocky islands, which are connected together by bridges.

The harbor, which is capable of holding 100 ships of war, is defended by two forts at the entrance and several others in the interior. Several noble docks have been formed here at an immense expense, one of which was cut out of the solid rock; the largest remains in an unfinished state. Carlsrona has considerable trade and 12,000 inhabitants.

Upsal, formerly the capital of Sweden, and residence of her kings, is 45 miles N. of Stockholm, in the middle of an open fertile plain. It is the seat of an archbishop who is primate of the kingdom, and has a famous university with an astronomical observatory. The Swedish geographers compute the longitude from the meridian of Upsal. The kings of Sweden are usually crowned here. The population is 4,897.

Gefle, 60 miles N. of Upsal, on the gulf of Bothnia, at the mouth of the river Gefle, has a good harbor, and considerable trade. The population is between 5,000 and 6,000. *Fohlun*, celebrated for the copper mines in its vicinity, is 110 miles N. N. W. of Stockholm, in the midst of rocks and hills between two lakes. The population was formerly above 7,000, but does not now exceed 4,200, the great copper mines having become less productive. *Dannemora*, the most celebrated iron mine in Sweden, is 30 miles N. of Upsal. In the neighbourhood of the mine are the establishments for smelting, hammering, and casting the iron; they form several villages of considerable size. The mines alone employ 1200 persons. *Drottningholm* is a royal palace four miles from Stockholm on an island in lake Malar, and is the usual summer residence of the king. *Narkoping*, on the Motula 76 miles S. W. of Stockholm, has 9000 inhabitants, and considerable trade. *Wisby*, on the west coast of the island of Gothland, is a place of considerable trade. *Lund*, famous for its university, is near the southern extremity of the kingdom, within five miles of the coast, 100 miles S. W. of Carlsrona. *Helsingborg* is on the Sound, which separates Sweden from the island of Zealand.

Education.] The *University of Upsal*, founded in 1476, had, in 1815, 21 professors and 1,200 students, of whom 269 were students of theology, 150 of law and 123 of medicine. It has a library of 60,000 printed volumes and 1,000 manuscripts; an observatory, a botanical garden and valuable cabinets of minerals and coins. The *University of Lund* has 15 professors, 300 students, a botanical garden, an observatory, and a library of 25,000 volumes. There are numerous literary and scientific associations in various parts of Sweden, particularly at Stockholm, and they have done much to raise the literary reputation of the country. Common schools are established in every parish, and there are few persons to be found who cannot read and write.

Religion.] The established religion is the Lutheran. There is one archbishop and 11 bishops, and the subordinate clergy are divided into several classes. The number of parishes is 2,537 and the whole number of clergy about 1,500.

Government.] The government of Sweden is a limited hereditary monarchy. The supreme power is in the Diet, which is

composed of the King and the States. The King has the command of the army and navy, fills up all commissions, nominates to all civil offices, and appoints the judges of the various courts. He alone convenes and dissolves the States, has the disposal of the public money, declares war, and makes peace. The power of making laws and of laying taxes is vested in the Diet. The States are composed of four houses. 1. *The House of Nobles*, consisting of counts, barons, and untitled nobility. 2. *The House of the clergy*, composed of the archbishop, the bishops and a certain number of ecclesiastics chosen to represent the subordinate clergy. 3. *The House of citizens*, consisting of representatives from 104 of the principal cities and towns in the kingdom. 4. *The House of peasants*, chosen to represent that class of the community. The House of Nobles usually consists of 1,000 or 1,200 members; that of the clergy of 50 or 60; the House of citizens of 110 or 120; and that of peasants of 160 or 170. In each of the Houses the majority governs, and the assent of three houses and of the King is necessary to pass a law.

Population.] The number of inhabitants in Sweden, in 1813, according to Hassel, was 2,407,206. More than nine tenths of this population is concentrated in the two southern districts of Gothland and Sweden proper, on less than one half of the territory. Reckoning the population of Norway at 930,000, that of the United Kingdom will be 3,337,206.

Army and Navy.] The army consists, according to Hassel, of 41,537 men, without including that of Norway. The navy contains 12 ships of the line, and eight frigates, together with 200 smaller vessels for the protection of the coast, and the number of sailors is 15,000.

Revenue.] The revenue in 1816 amounted to 5,768,681 rix dollars, and the public debt to 15,781,221 rix dollars. About two thirds of the debt being incurred in foreign countries and chiefly at Hamburgh, the country is overwhelmed with the paper money of that city; and the scarcity of gold and silver, and even of copper currency, is almost incredible.

Manufactures and Commerce.] The manufactures of Sweden are numerous but not entirely sufficient for the supply of her own population. Her commerce consists in the exchange of the products of her mines, forests and fisheries, for colonial produce and the manufactures of other countries. The principal exports are iron and iron ware, and next to these copper and other metals, herring and other fish, timber, tar and pitch. The imports are salt, corn, wine, colonial produce, and manufactured goods. The trade extends to all parts of Europe, the East and West Indies and America. More than one half of all the foreign trade is carried on through the port of Stockholm, and about one sixth through that of Gottenburg. The amount of merchant shipping belonging to Sweden in 1818 was 123,580 tons, and the number of seamen 9,417. The value of the exports is estimated on an average at \$6,000,000, and of the imports at \$5,500,000.

Islands.] Sweden possesses numerous islands in the Baltic sea, and the gulf of Bothnia. The island of *Oland*, one of the largest, is separated from the continent by Kalmar Sound. It is 60 miles long and on an average five or six broad, and contains 22,000 inhabitants. The island of *Gothland*, lying to the N. E. of *Oland*, is 70 miles long and contains 1,100 square miles, and 33,000 inhabitants. *Wishy*, on the west coast of the island, is the principal town. The isles of *Aland*, lying at the entrance of the gulf of Bothnia, were formerly a part of Sweden but they now belong to Russia.

LAPLAND.

Situation.] Lapland, or the country inhabited by the Laplanders, lies partly in Norway, partly in Sweden and partly in Russia. It is the most northerly country in Europe, and extends from lat. 64° N. to the North cape in $71^{\circ} 11'$ N. It is washed by the Atlantic ocean on the west, the Frozen ocean on the north, and the White sea on the east.

Extent and Population.] The following table shows the extent and population of each of the divisions of Lapland.

	<i>Sq. miles.</i>	<i>Population.</i>
Norwegian Lapland or Finnmark,	27,720	26,769
Swedish Lapland, { Lulea Lapmark, } Pitea Lapmark, } Umea Lapmark, } Asele Lapmark, }	50,000	10,000
Russian Lapland,	75,000	25,000
Total,	152,720	61,769

Of the population of Norwegian Lapland about 20,000 are descendants of Finns who emigrated to this country only a century ago. Nearly three quarters of the population of Russian Lapland, and one quarter of that of Swedish Lapland are also of foreign extraction, leaving less than 20,000 genuine Laplanders.

Face of the Country, Climate &c.] Near the gulf of Bothnia the land is low, but rises towards the interior into mountains, and near the centre of the country the summits rise to an elevation of 5,000 and 6,000 feet, and are covered with perpetual snow. The climate in winter is intensely cold, especially in the interior, where brandy sometimes freezes, and the rivers are covered for many months with ice to the depth of several feet. Toward the north the sun remains for many weeks below the horizon in winter, and in summer is as long without setting. During the long night of winter, however, the darkness is relieved by the brightness of the moon and the stars, and by the vivid coruscations of the

Aurora Borealis. In summer, the sun being so many hours above the horizon, the heat is intense, and vegetation proceeds with remarkable rapidity.

Productions.] In the low country, near the gulf of Bothnia there are large forests of spruce, Scots fir and other resinous trees. As you advance into the interior these trees gradually disappear, and long before you reach the tops of the mountains all vegetation entirely vanishes. Barley, rye, and occasionally oats are raised in favorable situations, and grain has been cultivated with success by the Finnish colonists under the parallel of 70° N. which may safely be pronounced the most northern limit of husbandry.

Animals.] Among the domestic animals are oxen, sheep and goats, all of a small size; but the reindeer is the most valuable gift that nature has bestowed on the poor Laplanders. It serves as the principal beast of burden, its milk is highly valued; its flesh supplies the chief nourishment of the inhabitants during part of the year; its sinews are made into thread, and its skin furnishes a great part of their dress. In summer it feeds on grass; but in winter it refuses hay, and obtains its whole nourishment from moss, which grows here in great profusion. A remarkable instinct is displayed by the animal in discovering this plant under the snow, and in digging it out. The foot of the reindeer seems shaped exactly to enable it to walk on snow, spreading out when set down, so as to cover a large surface, but contracting when lifted up, so as to be easily withdrawn if it happen to plunge too deep. This animal forms the chief wealth of the natives. The poorer classes have from 50 to 200; the middle classes from 300 to 700, and the affluent often above 1,000.

Manners and Customs.] The mountain Laplanders have no fixed habitation but wander about in quest of food for their flocks of reindeer, and lodge in tents or huts, which are usually about 9 feet high and 12 long. These rude erections are generally composed of six poles which meet at the top and support each other: the fire place consists of a few stones, and is always in the middle of the hut; the smoke issues by a hole at the top. The diet of the Laplanders is chiefly of animal food, those on the coast living on fish, those among the mountains on reindeer, and the fruits of the chase.

Character and Religion.] The Laplanders are generally about four feet high, with short black hair, narrow dark eyes, large heads, high cheek bones, wide mouth, thick lips and a swarthy complexion. It is but little more than a century since they were converted to Christianity, and notwithstanding the efforts of the missionaries they are still very ignorant of its doctrines and retain many of their heathen superstitions.

Trade.] During winter they carry on some traffic with the Swedes. This takes place at Tornea, and other towns on the gulf of Bothnia, and consists in exchanging skins, furs, dried fish, venison, and gloves, for flannel cloth, hemp, copper, iron and various utensils; but particularly for spiritous liquors, meal, and tobacco.

DENMARK.

Situation and Extent.] Denmark consists of several large islands lying between the Cattegat and the Baltic, and of a peninsula which is bounded W. by the North sea or German ocean; N. by the Skager Rack; E. by the Cattegat and the Baltic; S. E. by the dutchy of Mecklenburg in Germany; and S. by the Elbe, which separates it from the kingdom of Hanover. It extends from $53^{\circ} 34'$ to $57^{\circ} 45'$ N. lat. and contains 21,615 square miles.

Divisions.] The following table presents the divisions of Denmark, together with their population and extent.

	<i>Sq. miles.</i>	<i>Population.</i>	<i>Pop. on a sq. m.</i>
I. Danish Islands, - - -	5,170	498,000	96
1. Zealand, - - - -	3,168	343,000	
2. Funen, - - - -	1,342	121,000	
3. Laaland, - - - -	660	34,000	
II. Jutland, - - - -	9,262	419,000	45
1. Aalborg, - - - -	2,668	117,000	
2. Viborg, - - - -	731	70,000	
3. Aarhus, - - - -	2,547	132,000	
4. Ripen, - - - -	3,326	100,000	
III. Dutchy of Sleswick, -	3,564	288,000	80
IV. Dutchy of Holstein, -	3,168	325,000	102
V. Dutchy of Lauenburg, -	451	35,000	77
Total, - - - -	21,615	1,565,000	72

Straits.] There are three straits connecting the Baltic with the Cattegat, viz. *The Sound*, between the island of Zealand and Sweden; the *Great Belt*, between the islands of Zealand and Funen; and the *Little Belt*, between the island of Funen and the peninsula of Jutland.

Bays and Rivers.] The *Lymfiord* is a long, narrow and navigable bay, in the northern part of Jutland, setting up westward from the Cattegat, and extending nearly across the peninsula, being separated from the German Ocean by a sand bank only two or three miles in width. The bay of *Ringkiobing*, on the western coast of Jutland, puts up northward from the German ocean, from which it is separated by a long narrow sand bank. It is 35 miles long and no where more than eight broad.

The river *Eyder*, which forms the boundary between the dutchies of Sleswick and Holstein, rises near the eastern coast, and falls into the German ocean in lat. $54^{\circ} 17'$ after a westerly course of more than 100 miles. The tide ascends 60 miles, and it is navigable thus far for vessels of 120 tons. The *Elbe* is the southern

boundary of the country, dividing the dutchies of Holstein and Lauenburg from the kingdom of Hanover.

Canal.] The canal of Kiel connects the Baltic with the river Eyder, and thus opens a communication between that sea and the German ocean. It is 22½ miles long, 100 feet wide at the surface, 54 at the bottom, and at least 10 feet deep, and admits the passage of vessels of 120 tons. This canal was begun in 1777 and finished in 1784. The number of vessels that passed through it during the war of 1803, when the navigation by the Sound was interrupted, was from 3,000 to 4,000, and the tolls collected upon it afforded a considerable revenue.

Face of the Country, Soil and Productions.] The face of the country is a low plain interrupted by very few hills and no mountains. The principal ridge of hills runs through the peninsula of Jütland from north to south. It consists partly of gravel and partly of red sand, and produces only heath plants and low bushes. On the east side of this ridge the soil is fertile and productive; at the northern extremity it is sandy and dry; on the western coast, it is fertile but marshy, and protected against the inroads of the sea partly by natural sand-heaps and partly by artificial dykes. The soil of Sleswick and Holstein is very fertile, particularly in the marshy districts along the coast. The principal productions are grain, large quantities of which are exported; potatoes, tobacco, madder, flax, hemp, &c. In Funen, Holstein and the south of Jutland the agriculture may be compared with that of England.

Animals.] The Danish horses, particularly those of Holstein, are admired for their beauty, strength, and speed, and are exported in considerable numbers to Germany, France, Russia, and Sweden. The breed of horned cattle is also in general very good, and that of sheep has been of late years improved by intermixture with Merinos. Swine are raised in large numbers and furnish a large quantity of bacon for exportation to Norway, Holland and Lunec. Even the abundance of poultry is worthy of notice, as their feathers form an important branch of trade.

Climate.] The climate is temperate, and though the atmosphere during the greater part of the year is thick and cloudy as in England, the country is with few exceptions perfectly healthy. The winter is occasionally of extreme severity, and the sea is impeded with ice. The Sound has at times been crossed by heavy loaded carriages.

Chief Towns.] Copenhagen, the metropolis of Denmark, and the best built city in the north of Europe, is on the east coast of the island of Zealand about 20 miles from the narrowest part of the Sound. The harbor, which is formed by an arm of the sea running between the city and the opposite island of Amack, is deep enough for vessels of the largest size, and sufficiently capacious to admit 500 merchantmen, while the entrance is so narrow that only one ship can enter at a time. The city is made up of three distinct parts, viz. The Old Town in the S. W. which is the largest and most populous part; the New Town or Freder-

ickstown, in the N. W. some parts of which are extremely beautiful; and Christianshaven, in the south, on the island of Amack, separated from the rest of the town by the inlet that forms the harbor, over the narrowest part of which there are two bridges. The island of Amack is several leagues in circuit, and forms a succession of kitchen gardens and meadows, which furnish the city with vegetables, milk, butter, and cheese. Copenhagen is not only the residence of the court, but the seat of all the great public establishments of the kingdom. Among the public buildings and institutions are 20 churches, and several Jewish synagogues, 22 hospitals, a university, and a royal library of more than 250,000 volumes. The trade of the city is very extensive, and the shipping belonging to the port may be computed, on an average, at 400 vessels, manned by nearly 6,000 sailors. The population is computed at 105,000. Copenhagen was attacked by the British in 1807, and above 300 houses, including the cathedral and part of the university, were destroyed.

Altona, the second city in Denmark in size and importance, is on the Elbe two miles west of Hamburg. It is well built and has 7 churches, an academy with seven teachers, and several manufactories. It carries on considerable inland and foreign commerce, and is extensively engaged in the fisheries. The number of vessels belonging to the port is 70, of which 30 are employed in the herring fishery. The population, according to Hassel, is 23,083, of whom 2,400 are Jews.

Kiel, the capital of Holstein, stands 51 miles N. of Hamburg, at the bottom of a bay or gulf of the Baltic forming a convenient harbor, which is connected with the river Eyder by the canal of Kiel. A great annual fair takes place in January, but at other times there is little commercial activity. It has a university and 7,000 inhabitants. *Sleswick*, the capital of the duchy of the same name, is 26 miles N.W. of Kiel, at the bottom of a long narrow bay of the Baltic, and contains 7,000 inhabitants. *Flensburg*, 16 miles north of Sleswick, has a fine harbor and a flourishing commerce. The population is 15,000, and the number of ships 250. *Odensee*, the capital of the island of Funen, is 86 miles W.S.W. of Copenhagen, on a river which runs into a large bay on the N. E. side of the island about a mile from the town. The population is 6,500. *Aalborg*, the capital of a bishopric of the same name in Jutland, stands on the south bank of the bay of Lymford, about 10 miles from its mouth. It has considerable commerce in corn and excellent herrings. The population is 6,000. *Aarkuus*, on a bay of the Cattegat, 48 miles S. of Aalborg, is the chief point of communication between Jutland and the island of Zealand. It has 6,000 inhabitants, and carries on a considerable commerce, no less than 100,000 tons of corn being annually exported. *Gluckstadt*, on the Elbe, 20 miles from its mouth, and 28 N. W. of Hamburg, has a considerable number of vessels engaged in the whale fisheries. The population is 5,000.

Elsinore is a well known seaport in Zealand, 20 miles north of Copenhagen, on the west side of the Sound, nearly opposite to

Helsingborg in Sweden, at the point where the Sound is narrowest, being here less than 4 miles across. It has no harbor, but an excellent roadstead, generally crowded with vessels on their way to or from the Baltic, and anchoring here to pay toll or take in stores, the supply of which forms the business of the place. The aggregate number of vessels of all nations passing the Sound is nearly 10,000, of which by far the greatest proportion is British; and the toll paid by them is about one per cent. on the value of the cargoes, and varies in amount from £120,000 to £150,000 sterling. Consuls reside here from all the maritime nations in Europe. The population of the town is nearly 7,000. The fortress of Cronberg, situated on a point of land a little to the north of Elsinore, is accounted one of the keys of the kingdom, being specially intended to guard the passage of the Sound, though its inadequacy to this object was fully demonstrated by the passage of the British fleet in 1801.

Population and Religion.] The population according to Hassel is 1,565,000. The established religion is the Lutheran under 7 bishops and 2 general superintendants, but all other religions are tolerated. The whole number of the clergy is 1580.

Education.] The university of Copenhagen has 36 professors and 500 students, a library of 40,000 volumes, a botanical garden, and observatory. The university of Kiel has 28 professors and 107 students. In every parish there are two or three schools where children are taught reading, writing and arithmetic. There are besides many Latin schools maintained at the public expense.

Government.] Denmark was formerly a limited monarchy, but in 1660, by one of the most singular revolutions recorded in history, the nobility, clergy and peasantry joined in surrendering their rights to the sovereign, so that Denmark is now, in law, an absolute monarchy of the most unqualified kind; but the exercise of this power has been modified by the spirit of the age, the effect of the Protestant religion and the progress of improvement. The crown is hereditary in the male and female line, and the title of the sovereign is King of Denmark, grand duke of Holstein, duke of Sleswick, Lauenburg, &c. The duchies of Holstein and Lauenburg, which are within the limits of Germany, make the king of Denmark a member of the Germanic confederation, and entitle him to a voice in the diet of Frankfort. In regard to the administration of justice, Sleswick and Holstein preserve their ancient institutions, while Jutland and the islands are governed by the Danish code.

Revenue.] The revenue of Denmark is about \$7,000,000. The national debt is nominally between 60 and 70 million dollars, but in reality less on account of its depreciation.

Army and Navy.] The army on the present peace establishment consists of 26,000 men. The navy contains 3 ships of the line, 4 frigates and 3 brigs, with only 4,000 seamen in actual service, but the number is capable of being easily increased as there are several thousand registered seamen, at the disposal of the crown.

Manufactures and Commerce.] The manufactures, in general, extend only to the supply of the country, furnishing no surplus for exportation. The principal manufacturing establishments are at Copenhagen and Altona. The exports consist principally of corn to Norway; horses to Germany, France, Sweden and Russia; oxen to Holland and Germany; live hogs and bacon to Norway; and dried fish to the Mediterranean. In 1816 the value of the corn exported was about \$2,500,000, of fish \$500,000, and of animals \$500,000. Denmark is finely situated for navigation being almost surrounded by the sea. In 1802 there were 1,378 vessels belonging to this small state, measuring 130,000 tons, and manned by 9,000 seamen. Within a few years, however, the commerce and shipping of the country have very greatly diminished.

Islands.] The principal islands are Zealand, Funen and Laaland. All the other Danish islands in the Baltic, with one or two exceptions, are considered as dependencies on these three.

Zealand, the largest of the Danish islands, is separated by the Sound from Sweden, and by the Great Belt from the island of Funen. It is very fertile and produces all kinds of grain, particularly barley. Its principal dependencies are, 1. The island of *Samso*, between Zealand and Jutland, 14 miles long, 5 broad, and containing 44 square miles with 5,600 inhabitants. 2. *Moen*, lying off the S. E. extremity of Zealand and separated from it by a narrow channel, is 16 miles long and contains 90 square miles, and 7,000 inhabitants. It is very fertile in corn. 3. *Bornholm*, the most easterly of the Danish islands, is 75 miles east of Zealand and 15 from the coast of Sweden in lat. 55° 12' N. and lon. 15° 20' E. It is 20 miles long, and contains 230 square miles, and 19,000 inhabitants. The soil is stony but fertile, producing corn in abundance and good pasture. The shore is every where difficult of access on account of the rocks.

Funen, which ranks next to Zealand in size and importance, is separated from Jutland by the Little Belt. It is very fertile, and produces corn and cattle in abundance for exportation. The principal dependency of Funen is *Langeland*, lying near its S. E. extremity, and separated from it by a narrow channel. It contains 100 square miles and 11,000 inhabitants, and is everywhere fruitful.

Laaland, lying between Langeland on the west and Falster on the east, is considered the most fertile spot in the Danish dominions. The land is low and marshy and the climate unhealthy, but it produces all kinds of grain, potatoes, flax, and hops in abundance for exportation. *Falster*, lying to the east of Laaland and separated from it by a narrow channel, contains 200 square miles and 14,000 inhabitants. It is productive in various kinds of grain, pulse and potatoes, but especially in fruit, which has given it the name of 'the orchard of Denmark.'

Femern, on the eastern coast of Holstein, is about 30 miles in circumference, and contains 7,000 inhabitants.

FAROE ISLANDS. The *Faroe* or *Faroer* islands are a group of islands belonging to Denmark, lying in the Northern Atlantic

ocean to the N.W. of Shetland, between $61^{\circ} 15'$ and $62^{\circ} 20'$ N. lat. They consist of 25 islands, of which 17 are inhabited. The number of square miles is 550, and the population, in 1812, was 5,209. The islands consist generally of naked rocks, some rising to a great height, and presenting at a distance a most imposing appearance of grandeur. The principal part of the grain consumed in the islands is imported from Denmark. The chief wealth of the inhabitants consists in sheep; and fishing is also an important source of subsistence.

ICELAND.

Situation and Extent.] Iceland, a large island in the northern Atlantic ocean belonging to Denmark, is situated between 63° and 67° N. lat. and between 12° and 25° W. long. Its length from east to west is about 280 miles, its mean breadth from north to south 210, and its superficial contents may be estimated at 40,000 square miles.

Face of the country, Mountains, &c.] Iceland has every appearance of having been formed by the operations of submarine volcanoes. In no quarter of the globe do we find crowded within so narrow a compass such a number of volcanic mountains, so many boiling springs, or such immense tracts of lava as here arrest the attention of the traveller. The general aspect of the country is the most rugged and dreary imaginable. On every side appear marks of confusion and ruins. Streams of brown lava destitute of all vegetation, vast chasms, from some or other of which volumes of smoke are perpetually ascending, occur in every part of the island. Every hill almost is a volcano; and besides the smaller cones and craters, there are several, whose eruptions are of the most terrific character. In the midst of this region of fire are not fewer than twelve or fourteen mountains, whose summits are covered with eternal ice, the quantity of which is every year increasing and extending nearer and nearer to the inhabited districts. The principal range of mountains runs through the island from east to west, and at the eastern extremity of the chain the ice has advanced almost to the shore, and threatens to cut off the communication between the southern and eastern districts. The most celebrated single mountain is Hecla, a volcano, which rises near the southern extremity of the island to the height of 5,000 feet above the level of the sea, and whose eruptions have been very numerous and powerful.

Boiling Springs.] These springs occur in almost every part of the island and many of them throw up large columns of boiling water, accompanied by immense volumes of steam, to an almost

incredible height into the atmosphere, presenting to the eye one of the grandest appearances in nature. Of these springs the most magnificent are the well known Geysers, but there are 8 or 10 others scarcely less remarkable, some of which throw up jets of thick boiling mud, and others, of black sulphureous vapour. The Geysers are situated on the west side of the island about 16 miles north of Skalholt. In one of them the column of water is propelled from an orifice nine feet in diameter with inconceivable force and a tremendous roaring noise, sometimes to the height of 150 feet, and the largest stones thrown into the pipe are instantly propelled to an amazing height. During a late visit to the Geysers, Dr. Henderson discovered that the fountain, when tranquil, might be excited to the most violent action. This he accomplished by throwing into the pipe a great quantity of large stones, when the fountain immediately began to roar and spout with more than usual violence; the jets exceeded 200 feet in height, the stones were thrown much higher, and when the water was all exhausted, the column of steam continued to rush up with a deafening roar for nearly an hour.

Climate.] The climate is very unsteady, but usually not so cold as would be expected from its high latitude. The winter is sometimes not so severe as in Denmark. But the temperature in the spring and summer is liable to be very seriously affected by the approach of immense quantities of floating ice, which are drifted from the polar regions, and accumulate on the coast. Whenever this occurs fogs and a cold chilling atmosphere spread over the whole island, and the little vegetation that may exist is totally destroyed.

Soil and Productions.] The whole interior of the island, comprehending more than three fourths of its area, is an inhospitable waste, without a single human habitation, and almost entirely unknown to the natives themselves. It is in the valleys near the coast, that the cottages of the peasants are generally found, and that a scanty herbage for three or four months in the year affords a miserable subsistence to a few horses, cattle and sheep, and sometimes a little hay for the winter. In years of extreme scarcity, the poor animals are fed with dried fish cut small, and with various kinds of sea weed collected on the shores. No grain of any kind is raised, no woods are to be seen, but here and there a few birch trees, which seldom exceed the height of 5 or 6 feet. Potatoes have been introduced and cultivated with some success.

Population.] The population is estimated at 48,000. There is reason to believe that the population was formerly above 60,000; but during the last century vast numbers perished by famine, and especially by the small pox which in one year swept off 16,000 persons. With the exception of Reykiviak on the southern coast, which may contain about 500 inhabitants, and half a dozen other places along the different coasts, called villages, which consist of three or four houses and a church, the population is scattered over the plains and valleys, in insulated farm-

houses, from some of which the nearest farm is at the distance of 8 or 10 miles.

History and Government.] Iceland was settled in the year 874 by a colony of voluntary exiles from Norway, who abandoned their native country to avoid the tyranny of the ruling prince. The government which they established in their new abode was perfectly free and republican and admirably adapted to the circumstances of the people, as may be inferred from its long continuance of nearly 400 years. In the year 1261 their liberties were somewhat abridged by becoming tributaries to the mother country, but they expressly stipulated that they should be allowed to retain their ancient laws and privileges; and that they should be exempt from all taxes. In 1387 they were transferred to Denmark, but no material change took place in their internal polity till the year 1800, when the Althing or general assembly of the island was abolished, and a supreme court, consisting of a chief justice, two assessors and a secretary, was established in its room, from which an appeal lies to the high court in Denmark.

Religion.] The original settlers were Pagans. Christianity was introduced in the year 1000, and the doctrines of Lutheranism in 1540. There is one bishop, 18 provosts or deans, and 184 inferior clergy, who discharge their duties with great fidelity, but receive scarcely any compensation for their services. The richest living does not produce 200 dollars; many of the salaries are 20 and 30 dollars, and there are some as low as 5 dollars.

Education.] Notwithstanding the desolation with which they are surrounded, the general state of mental cultivation, and the diffusion of knowledge among the inhabitants, have no parallel in any nation, even in Europe. It is exceedingly rare to meet with a boy or girl, who has attained the age of nine or ten years, that cannot read and write with ease, and in almost every family there is some individual capable of entering into conversation on topics which would be reckoned altogether above the understandings of people in the same rank of society in other countries. This is not owing to the institution of public schools, for there is but one on the island, but to the rigid attention which is paid to domestic education. In the dark ages, when continental Europe was immersed in profound ignorance, the Icelanders cultivated poetry with success, and their historical writings are still highly valued.

Character.] The Icelanders are a very moral and religious people, and punctual in the performance of both public and private exercises of devotion. Their predominant characteristics are unsuspecting frankness, pious contentment, and a steady liveliness of temperament, combined with a strength of intellect and acuteness of mind, seldom to be met with in other parts of the world. In personal appearance they are rather above the middle size, of a frank and open countenance, a florid complexion, and yellow flaxen hair. Their houses are mere hovels and their diet is of the coarsest kind, consisting chiefly of fish and animal food without bread or vegetables, and the common beverage is sour whey mixed with water. Yet with all these privations, with

all the inclemencies of the climate, and the physical evils to which they are exposed, they have an unconquerable attachment to their native land, and universally believe that Iceland is the finest country on which the sun shines.

Fisheries and Commerce.] The Icelanders derive their chief subsistence from the sea. Cod and haddock are plentiful on the coasts and many hundred boats are employed in the fisheries. The exports are fish of all kinds, oil, tallow, wool, worsted stockings, feathers and the skins of animals. The imports are corn, salt, wine, manufactured articles and colonial produce.

RUSSIA.

Situation and Extent.] Russia, the most extensive country ever included under one empire in ancient or modern times, embraces nearly one half of Europe and more than one third of Asia, extending without interruption from the Baltic sea on the west to the Pacific ocean on the east, and from the Frozen ocean on the north to the Chinese empire, Tartary, Persia and Turkey on the south. It lies between $39^{\circ} 30'$ and 76° N. lat and between 18° and 192° E. lon. extending through nearly one half of a circle of latitude. When it is noon along its eastern boundary it is almost midnight in its western provinces. The area is estimated by Hassel at 7,595,000 square miles, being one ninth part of terra firma, and one twenty-eighth part of the surface of the globe.

Divisions.] Russia is commonly described under two divisions, viz. Russia in Europe and Russia in Asia.

RUSSIA IN EUROPE

Situation and Extent.] Russia in Europe is bounded N. by the Frozen ocean, E. by Russia in Asia; S. by the sea of Azoph and the Black sea; W. by Turkey, the Austrian dominions, the Prussian dominions, the Baltic sea, Sweden and Norway. The boundary on the side of Norway and Sweden commences on the coast of the Frozen ocean, in about 30° E. lon. and proceeds in a southwesterly direction till it meets the mountains which separate Norwegian from Swedish Lapland; then, passing along the mountains in a westerly direction to the source of the Tornea, it descends that river into the gulf of Bothnia. The boundary on the side of Turkey is the river Pruth, and the Danube from its confluence with the Pruth to the Black sea. The boundary on the side of Asia is very differently laid down by different writers; some pursuing the most natural line along the Don, the Volga and

the Kama; but as these rivers intersect several of the provinces of the empire, others find it more convenient to include all the intersected provinces in European Russia. We have adopted the latter course, and according to this division European Russia (including the kingdom of Poland,) contains 1,891,512 square miles.

Divisions.] Russia in Europe is divided into 46 governments, the extent and population of which are given in the following table.

<i>In the northwest.</i>			
Governments.	Square miles.	Population.	Pop. on a sq. m.
1. Finland,	89,520	1,115,000	12
2. Novgorod,	54,440	800,000	15
3. Pskov,	22,195	700,000	31
4. St. Petersburg,	18,015	700,000	38
5. Esthonia,	7,000	250,000	36
6. Livonia,	19,925	610,000	30
7. Courland,	10,810	420,000	39
8. Wilna,	22,955	1,100,000	48
<i>In the north.</i>			
9. Archangel,	377,655	200,000	1
10. Olonetz,	48,560	255,000	5
11. Vologda,	178,490	665,000	4
<i>In the west.</i>			
12. Vitepsk,	16,855	750,000	44
13. Mohilev,	18,420	790,000	43
14. Minsk,	36,765	935,000	25
15. Grodno,	11,385	625,000	55
16. Bialystock,	4,372	185,000	42
17. Volhynia,	28,725	1,200,000	41
<i>In the centre.</i>			
18. Moscow,	10,055	1,100,000	109
19. Vladimir,	19,545	1,070,000	55
20. Jaroslav,	14,260	810,000	57
21. Kostroma,	38,400	1,160,000	30
22. Niznei-Novgorod,	20,410	1,100,000	54
23. Riazan,	13,020	1,050,000	80
24. Tambov,	22,780	1,150,000	50
25. Voronez,	30,430	775,000	25
26. Kursk,	14,895	1,210,000	81
27. Orel,	16,030	1,050,000	65
28. Tula,	11,355	960,000	81
29. Kaluga,	8,385	900,000	107
30. Smolensk,	21,420	1,065,000	50
31. Tver,	24,015	1,060,000	44
<i>In the east.</i>			
32. Sarator,	91,140	950,000	10
33. Penza,	16,515	790,000	48
34. Simbirsk,	29,770	850,000	28

RUSSIA.

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Governments.	Square miles.	Population.	Pop. on a sq. m.
35. Kazan,	11,480	880,000	75
36. Viatka,	47,180	1,050,000	22
37. Perm,	126,435	1,110,000	8
<i>In the south.</i>			
38. Podolia,	20,380	1,820,000	65
39. Kiev.	20,760	1,000,000	43
40. Czernigov,	25,260	1,150,000	46
41. Poltava,	16,180	1,500,000	92
42. Slobodsk Ukraine,	12,610	740,000	59
43. Ekaterinoslav,	34,060	560,000	16
44. Cherson,	18,025	500,000	27
45. Taurida,	43,355	260,000	6
46. Bessarabia and } Moldavia, }	18,045	240,000	13
Goutry of the } Don Cossacs. }	80,000	350,000	4
Kingdom of Poland,	48,730	2,793,000	57
Total in European } Russia, }	1,891,512	41,773,000	22

Seas and Gulfs.] There are four seas bordering on Russia; the *White sea* on the north, the *Baltic* on the west, the *Black sea* and the sea of *Azoph* on the south. There are five large bays or gulfs; the *gulf of Bothnia*, the *gulf of Finland*, and the *gulf of Riga* opening into the Baltic; and the bays of *Onega* and *Archangel* opening into the White sea.

Lakes.] There are no lakes of any importance except in the northwestern provinces where they are very numerous, and some of them of a large size. The most remarkable are, 1. *Lake Ladoga*, the largest lake in Europe, being 130 miles long, 75 broad, and containing 6,200 square miles. It lies a little to the east of the gulf of Finland, into which it discharges its waters through the short river *Neva*. 2. *Lake Onega*, 130 miles long and 40 broad, lies east of lake Ladoga and is connected with it by the navigable river *Svir*. 3. *Lake Ilmen*, 48 miles long, is situated to the south of lake Ladoga, with which it is connected by the river *Volchov*. 4. *Lake Peipus*, lying south of the gulf of Finland, is 50 miles long and 35 broad, and communicates by a short strait at its southern extremity with the lake of *Pskov*. It has two outlets, one proceeding north to the gulf of Finland, and the other west to the gulf of *Riga*. 5. The *Bielo-Ozero*, or *White lake*, lies 25 miles S. E. of lake *Onega* and discharges itself into the *Volga* by a short river issuing from its S. E. extremity.

Face of the Country.] European Russia consists of an immense plain, interrupted only in a few places by hills of a moderate elevation. The only mountains are the *Ural mountains* in the N. E. which form part of the boundary between Europe and Asia; the mountains of *Russian Lapland* in the N. W. which are a continuation

tion of the Scandinavian chain, and terminate among the small lakes between the gulf of Finland and the White sea; and the mountains of Taurica in the south, which occupy the southern part of the Crimea, a large peninsula which projects into the Black sea. The principal hills are the Valdai ridge which runs from N. E. to S. W. separating the waters which flow N. W. into the Baltic from those which flow S. E. into the Black sea, the sea of Azoph and the Caspian sea. They are of very moderate elevation, no part being more than 1,200 feet above the level of the sea. There are forests of immense extent in various parts of the country, but in general the great natural feature of European Russia is its steppes, which are vast plains formed in great part of sand, and with little wood except stunted birches.

Rivers.] The following are the principal rivers, beginning in the N. E. 1. The *Petschora* rises in the Ural mountains in about 61° N. lat. and flowing a little west of north, discharges itself into the Frozen ocean after a course of more than 600 miles. 2. The *Dwina*, sometimes called the *northern Dwina*, discharges itself into a bay of the White sea at Archangel, after a northerly course of 500 miles. 3. The *Tornea*, which forms the boundary between Russia and Sweden, falls into the head of the gulf of Bothnia after a course of 300 miles. 4. The *Neva* forms the outlet of the great lake Ladoga, and after a westerly course of 35 miles empties itself into the gulf of Finland, below St. Petersburg, by three mouths. It is from 300 to 400 yards wide, and from 10 to 15 feet deep. 5. The *Duna*, or *Dwina*, rises in the Valdai hills near lat. 56° N. and lon. 33° E. and pursuing a westerly course of 500 miles falls into the gulf of Riga at Dunamunde a few miles below Riga. It is navigable throughout the greater part of its course. 6. The *Vemey* rises a few miles south of Minsk, in lat. 53° N. and lon. 27° 30' E. and running north of west passes into Prussia, and discharges itself into the Kurische Haf. a large inlet of the Baltic. 7. The *Pruth* rises in the Carpathian mountains near lon. 25° E. and lat. 48° 30' N. It runs first to the east and then to the south. The first part of its course for a little distance is in the Austrian dominions, but it soon becomes the boundary between Russia and Turkey and continues so till it falls into the Danube. 8. The *Dniester* has its source in a lake amid the Carpathian mountains in Austrian Galicia, and after traversing a great part of that country enters Russia and empties itself into the Black sea, after a S. E. course of about 600 miles. 9. The *Dnieper* rises in the Valdai hills near the source of the Duna, and after a winding course to the south of more than 800 miles, in which it passes by Smolensk, Mohilev, Kiev, and Cherson, falls into the Black sea a little to the east of the mouth of the Dniester. It begins to be navigable very early, even above Smolensk; but in the lower part of its course the navigation is impeded by islands, and at one place, about 20 miles from its mouth, by falls which continue for nearly 40 miles. A little above its mouth the river widens into a kind of lake or marsh, called Luman, into which the *Bug*, one of the principal tributaries of the Dnieper, discharges

itself after a S. E. course of about 400 miles. 10. The *Don* rises in the Valdai hills in the government of Tuin, and pursues a course at first S. E. then S. W. and on the whole S. of about 800 miles, and discharges itself into the bay of Taganrok at the N. E. extremity of the sea of Azoph. It is navigable for ships of burthen for many hundred miles from the middle of April to the end of June, but during the rest of the year the water on several of the shallows is not above a foot and an half deep. 11. The *Volga*, the largest river in Europe, has its source in a lake among the Valdai hills in lat. 57° N. and lon. 33° E. and after running at first in an easterly direction to Kazan in lon. 50° E. turns and pursues a southerly course till it discharges itself into the Caspian sea through 70 mouths. It is 3,200 miles long, and is remarkably free from rapids, being navigable without interruption to Tver in lat. $56^{\circ} 50'$ N. and lon. $36^{\circ} 16'$ E. It abounds in fish more than any other river of the old world; the produce of the fisheries near the mouth of the river being valued at several million dollars annually. The principal tributaries of the *Volga* are the *Kama*, which joins it 24 miles below Kazan, and is by some geographers considered as part of the boundary between Europe and Asia; and the *Oka*, which joins it at Niznei Novgorod in lon. 44° E.

Climate] Russia in Europe presents almost every variety of climate as might be expected from the great extent of the country. Its northern provinces are almost uninhabitable on account of the intensity and long continuance of winter. The peninsula of the Crimea presents, on the contrary, all the luxuriance of the southern year; while the middle regions are blest with the mild seasons of England and Germany. In general it may be remarked that the cold is far greater than that of the west of Europe in the same parallels of latitude. The *Neva* is annually frozen from November to March, and the ice in the sea of Azoph and the Black sea sometimes extends to a considerable distance from the land.

Soil and Productions.] The soil is very various, from the cold marshes which border the White sea and Frozen ocean to the rich and fertile plains along the *Don* and the *Volga*. In respect to productions Russia may be divided into four regions, 1. The northwest division, embracing Finland and the adjacent provinces to the north and east, is a bleak country producing rye, barley, oats, and in a few districts wheat, but a great part of the surface is covered by lakes and rocks. 2. The northern division, comprising all the rest of the country above the parallel of 60° , is too bleak for tillage, and the inhabitants live chiefly by hunting and fishing. 3. The central and much the largest division, including all the country between the parallels of 50° and 60° N. lat. produces hemp, flax and wheat in great quantities. 4. The southern division, including all the provinces below the parallel of 50° , produces tobacco and maize as well as wheat, and near the southern verge vines, mulberries, almonds, figs and the olive. Agriculture is in general in a very backward state, though less so in the Baltic and

the southern provinces than in the rest of the empire. Russia in Europe is not distinguished for its mineral productions, the mountains which contain the richest mines being in the Asiatic provinces.

Chief Towns.] *St. Petersburg*, the capital of the Russian empire, is situated in lat. $59^{\circ} 56'$ N. at the eastern extremity of the gulf of Finland, at the mouth of the river Neva. It is entirely a modern city, having been founded by Peter the great in 1703, on a low marshy spot of ground, which at that time contained only two huts. The form of the city is nearly circular, and its diameter is about four miles. The Neva flowing from east to west divides it into two parts, of which the larger and more populous is on the south side of the river. Soon after entering the city the Neva sends off a branch, and from the middle of the city another branch, both to the northward. These fall soon after into the sea, forming two islands on which the northern part of the city is built. The main stream flows through the middle of the city, and has along its south side a quay three miles in length, and embanked in all its extent with a wall and pavement of granite. The southern division of *St. Petersburg* is intersected by canals, so that water communications extend to every part of the town. No city in Europe can compare with *St. Petersburg* in the width and regularity of its streets. The houses are generally of brick and built in a simple style of architecture. The commerce of the town is very extensive, about one half of the foreign trade of the Russian empire being carried on through this port. The merchants in the foreign trade are almost entirely foreigners, principally Englishmen, but the interior traffic is in the hands of the natives, foreigners being prevented by law from engaging in it. The population of the town according to a census taken in 1817 was 285,000, of whom 55,000 were in the land and sea service, and 25,000 were foreigners.

Moscow, the largest city in Russia, and formerly the capital of the empire, is situated 400 miles S. E. of *St. Petersburg* in lat. $55^{\circ} 46'$ N. and lon. $37^{\circ} 33'$ E. Including the suburbs it is more than 20 miles in circumference. The river Moskwa, a branch of the Oka, traverses it from west to east, and in its progress through the city receives two rivulets which flow into it from the north. *Moscow* consists of five circular or semicircular divisions, each surrounding the other. 1. The central part contains the Kremlin or citadel, and the ancient palace of the czars, together with several churches and monasteries. 2. The Kitaigorod, or Chinese town, surrounding the Kremlin in a circular form, contains numerous bazars and shops, and several public buildings. 3. The Bielo-gorod or White town extends partly around the second division in the form of a crescent, and derives its name from the white stone walls with which it was formerly encompassed. 4. The Semliano-gorod or Earthen town, much more extensive than either of the preceding, and surrounding them both in a circular form. 5. The Slobodes or suburbs, which to the number of nearly 30, surround the whole, and occupy a great extent of

ground. In September 1812, at the time of the French invasion, the Russians set fire to the city and three fourths of it were consumed, the central divisions alone being preserved. Since that time the city has been rebuilt and the population carried nearly to its former magnitude. The deficiency is in the palaces of the nobility, many of which are not rebuilt, having before been on a scale by far too large for the income of their owners, who are now contented to live at a reduced expense on their estates in the country. The Kremlin stands on a height commanding a prospect of nearly the whole city. It is the great depot of the antiquities and curiosities of Moscow, and of the regalia of the Russian empire. Here also is the tower of Ivan, which is still amply replenished with bells, and which formerly contained the largest bell in the known world, the weight being above 200 tons. This remarkable monument of the taste of a rude nation, fell last century, in consequence of the tower being burned, and is now broken and considerably sunk in the earth. In regard to trade Moscow, though at a great distance from any sea, is the grand emporium for the interior of the empire. The population in summer does not much exceed 200,000; but in winter, it is nearly 300,000 from the great resort of traders and of the Russian nobility.

Odessa, the second commercial city in the Russian dominions, is situated on a small bay of the Black sea, between the mouths of the Dnieper and the Dniester. It is entirely of modern erection, having been founded by Catherine II. in 1792. The port is artificial, being formed by two large moles, each about a quarter of a mile long, and embracing a space sufficient for the reception of about 800 vessels. It is deep enough for the largest ships, and being never frozen, has a great advantage over all the other Russian harbors in the Black sea, which are generally obstructed by ice for several months, while vessels can arrive and depart from Odessa through the whole winter. The roads without the port are extensive, and safe in summer. The prosperity of Odessa has long been a favorite object of the Russian government. Fortifications, magazines, piers, and public works of various kinds have been erected at great expense, and the most liberal encouragement has been offered to foreigners to settle in the town and its vicinity. The increase of the population and commerce has been astonishingly rapid. In 1803 the town contained only 8,000 souls, and the surrounding country for many leagues was an uncultivated desert; in 1811 the population amounted to 25,000, and the environs within a radius of 80 miles, contained 40 flourishing villages; in 1820 the population of the town was more than 40,000, while the surrounding country had increased in an equal ratio. The great article of commerce is wheat, of which, in 1815, 6,000,000 bushels were exported, and the number of vessels employed in the trade of the port was more than 1,000.

Riga, the third town in commercial importance, is situated 235 miles S.W. of St. Petersburg, in a large plain on the Duna, about nine miles from the sea. The river is wide, and forms a safe and spacious harbor. Although not a regular fortress, Riga is a strong

town, having a citadel, and being surrounded with an earthen mound and a moat. The entrance of the river is defended by the fortress of Dunamunde. The commerce of the town is very extensive, the number of vessels arriving annually being between 700 and 800, and the value of the exports, consisting principally of timber, flax, hemp and corn, being computed at £1,000,000, of which one half are sent to Great Britain. The foreign trade is chiefly managed by English and Scotch merchants. The population is estimated at 36,000.

Archangel is a well known trading place on the Dwina, 24 miles from its entrance into the White sea, and 400 miles N. E. of St. Petersburg. It is much frequented by the English, Dutch and Germans, and upwards of 100 foreign ships enter the port annually. The exports consist of train oil, tallow, tar, linseed, furs and coarse linen. The trade of this place received a great shock on the foundation of St. Petersburg, the privileges conferred on the latter inducing the most opulent of the merchants to remove thither. The population in its flourishing state was 30,000; but at present only 7,000.

Cronstadt, the principal station of the Russian navy, is on the southeast side of an island in the gulf of Finland, 22 miles west of St. Petersburg. The harbor is very spacious, and the part appropriated to the navy is furnished with docks capable of containing 10 men of war. Here is a foundry for casting cannon, a ropewalk where cables of all sizes are manufactured, and great magazines of naval stores. Cronstadt is defended towards the sea by fortifications projecting into the water, and towards the land by ramparts and bastions. The principal passage to St. Petersburg lies between the town and a small island more than a mile distant, on which there is a fort for the defence of the intermediate channel. All vessels trading to St. Petersburg are examined here, and the largest vessels can ascend no further. The population of the town is 40,000, of whom at least 10,000 are sailors.

Cherson is situated in an extensive plain on the right bank of the Dnieper, about 60 miles from its mouth, where that river begins to form the marshy lake called Liman, which presents a spacious but shallow harbor. It was founded in 1778, by the empress Catherine, who intended to make it a place of extensive commerce and the principal station of the Russian navy in the Black sea. Within 10 years after its establishment it is said to have contained nearly 50,000 inhabitants, and many large ships of war were launched from its docks. But the difficulty of navigating the Dnieper and other inconveniences occasioned a removal of the naval establishment to Nicolajev, and owing to the same cause, its commerce has also greatly declined. The population at present is less than 20,000. Nicolajev, the principal naval station of the Russians on the Black sea, is on the Bog, 30 miles from its mouth, and 45 N. W. of Cherson. It was founded in 1791, and from its advantageous situation bids fair to become one of the largest cities in the empire. The population at present is about 5,000 but is very rapidly increasing.

The other principal ports in the Black sea, and sea of Azoph, are *Akerman*, at the mouth of the Dniester on the west side, a place of considerable trade and containing 20,000 inhabitants; *Oichukov*, situated at the entrance of the estuary of the Dnieper, on the N. side, formerly a place of extensive trade with 30,000 or 40,000 inhabitants, but which since the establishment of Odessa has regularly declined; and *Taganrock*, situated on a promontory which projects into the sea of Azoph not far from the mouth of the Don: it contains 10,000 inhabitants and has an extensive commerce with the countries on the Mediterranean.

The following are among the other principal towns in the interior. 1. *Tver*, situated in lat. $56^{\circ} 50'$ and lon. $36^{\circ} 14'$ at the confluence of the Tvertza with the Volga contains 20,000 inhabitants, and carries on considerable trade. 2. *Niznei Novgorod*, situated at the confluence of the Oka and the Volga, is a thriving commercial town with 10,000 inhabitants, and has a fair which is frequented by crowds of merchants from different parts of Russia, Poland, Germany, Tartary and even Persia. The quantity of merchandize sold here is immense. 3. *Tula*, celebrated for its hard-ware manufactures, is on the Upa, a branch of the Oka, in lat. $53^{\circ} 45' N.$ and lon. $37^{\circ} 40' E.$ and contains 20,000 inhabitants. Here is the largest manufactory of fire-arms in Russia. 4. *Smolensk*, on the Dnieper, in lat. $54^{\circ} 50' N.$ contains 12,000 inhabitants. 5. *Wilna* on the Wilia, a branch of the Niemen, in lat. $54^{\circ} 41' N.$ and lon. $25^{\circ} 17' E.$ contains a university and 20,000 inhabitants, of whom 5,000 are Jews. 6. *Kiev*, on the Dnieper, in lat. $50^{\circ} 27' N.$ has a university and about 20,000 inhabitants. 7. *Ismail*, formerly belonging to Turkey, and memorable for its siege and capture by the Russians under Suwarrow in 1790, is on the N. side of the principal arm of the Danube, 33 miles from its entrance into the Black sea.

Inland Communication.] Owing to the flatness of the country the rivers of Russia are generally navigable almost to their sources, and a water communication is thus formed from the coast to every part of the interior. Several of the largest rivers, though flowing in opposite directions, rise near the same spot, and by means of short canals connecting them, a complete inland navigation is opened between the seas on the opposite coasts of the empire. The Caspian sea is connected with the Frozen ocean by means of a canal from the Volga to the Dwina, and with the Baltic by the celebrated canal of Vishnei-Voloshok, which with several intermediate streams unites the Volga and the Neva. The Black sea communicates with the Baltic by two canals, one connecting the Dnieper with the Duna, and the other connecting the same river with the Niemen. There are various other canals opening less extensive communications. In winter the snow affords an easy mode of conveyance, and merchandize is transported on sledges from Moscow to the coast of the Pacific ocean at the remotest extremity of the empire.

Population.] The whole Russian empire, including the kingdom of Poland, contains according to Hassel 45,515,797 inhab-

itants. The mass of this population is concentrated on a very small portion of the territory in the southern and western parts of European Russia, the northern provinces together with the whole of Asiatic Russia being very thinly inhabited. No kingdom in the world contains so many races of men, and so different in their origin, language, manners and religion. It is estimated that there are more than 100 different nations who speak at least 40 different languages. 1. The *Slavonians* amount to 38,800,000, and are subdivided into Russians, Cossacks, Poles, Lithuanians, &c. 2. The *Finns*, 2,370,000 in number, are divided into proper Finns, Esthonians, Livonians, Laplanders, &c. 3. *Tartars*, 1,850,000, divided into proper Tartars, Nogays, Kirgises, &c. 4. *Caucasians*, 1,200,000. 5. *Mongols*, 300,000, divided into Mongols, Buriats and Kuriles. 6. *Mundshurs*, 80,000. 7. *Tribes inhabiting the polar regions*, viz. Samoieds, Ostiacks, Kamtschadales, &c. 300,000. 8. *Walachians and gipsies*, in Moldavia and Bessarabia, 300,000.

Cossacks.] The Cossacks of the Don occupy an extensive territory on both sides of the river Don, and are governed by a military constitution. They are exempted from taxation, and enjoy great privileges when compared with the other members of the Russian empire. In return, each man is accounted a soldier, and is bound to maintain two horses, for which the crown supplies oats and hay during only six months of the year. Their number amounts to 40,000 fighting men, who receive no pay in time of peace, but in time of war, besides being furnished with every necessary, receive 12 dollars a year, and the usual military rations. Besides the Cossacks of the Don there are others on the Volga, the Bog, and in Asiatic Russia, governed very much in the same manner.

Classes of Society.] The Russian nation consists almost entirely of two classes, the nobility and the peasantry. The middle class comprises, even in the large towns, hardly any other than foreign settlers or their descendants. The nobility live in great style, and their persons and property are exempt from taxation. The peasantry are in a very abject condition, being bought and sold along with the estate which they cultivate, and sometimes even separately. Government has long felt the advantage that would result from emancipation, and in some of the provinces this has been partially effected.

Religion.] The established religion is that of the Greek church, with a free toleration however of all sects, even Mahometans. The numbers attached to the principal denominations, according to Hassel, are as follows: Greek church 34,000,000; Catholics and united Greeks 5,308,000; Lutherans 2,500,000; Mahometans 1,800,000; Jews 510,000. The number of churches throughout the empire is nearly 20,000; that of priests about 68,000; and if to these be added the monks, almost as numerous as in Catholic countries, the whole number of ecclesiastics in Russia may be computed at 400,000.

Education.] Education is still at a very low ebb in Russia, there being very few schools except those supported by government. Seminaries, great or small, have for a century past existed in the chief towns, but the villages and open country have been immersed in almost as great ignorance as the interior of Africa. In 1802 an imperial ukase was issued establishing a systematic plan of education for the whole empire, under the charge of the directing synod of the church. By this act were established six universities, viz. at St. Petersburg, Moscow, Wilna, Dorpat, (in Livonia) Charkov in the south, and Kasan in the east. Each of the great governments of the empire has a gymnasium; each of the circles or lesser divisions a high school; while an elementary school is or ought to be established in each parish, or, where the population is small, in every two parishes. The parish schools, however, are not generally established, and when they are, are indifferently conducted. Besides these, there are special schools established at the expense of the government for instruction in navigation, the military art, painting, mining, theology, &c.

Government.] The Russian government was till lately a perfectly absolute monarchy. The title of the sovereign is "emperor and autocrat of all the Russias, and king of Poland." There are ministers for each of the great departments of government, viz. the army, the navy, the treasury, &c. and a senate whose powers are partly deliberative and partly executive. The present emperor has declared the Russian government to be a constitutional monarchy, and has given the senate the right of remonstrating against any ukase or edict contrary to law.

Revenue and Debt.] The national debt is about £35,000,000, exclusive of a large amount of paper money issued by the government, and which has depreciated to one third part of its nominal value. The interest of the debt at $7\frac{1}{2}$ per cent. is £2,250,000. The whole revenue of Russia is estimated £15,000,000 sterling.

Army and Navy.] The army is the largest in Europe, consisting, according to the return of 1819, of 778,000 men, exclusive of militia and irregular troops of various descriptions. Of this number 613,000 were infantry, 118,000 cavalry, and 47,000 artillery. The irregulars, infantry and cavalry, were estimated at 405,000. Owing to the financial embarrassments, the extensive frontier which is to be protected, and various other causes, it is supposed that not more than from 200,000 to 300,000 of this vast force could be marched out of the empire.

The navy in 1820 consisted of 30 ships of the line, 20 frigates, 15 sloops, and 200 galleys. The men fit for the duty of the navy, who can be called forth in time of war, are between 30,000 and 40,000. A part of the navy is stationed in the Baltic, a part in the Black sea, and a part in the Caspian.

Manufactures.] The Russian manufactures owe their origin to Peter I. and since his time they have so greatly increased, that many articles are now made within the empire, which were formerly imported from foreign countries. The principal manufac.

tures are leather, in which Russia excels all other European nations, linen, coarse woollens, soap, sail cloth, &c. Moscow and Petersburg are the principal manufacturing towns; but as to hard-ware, Tula, to the south of Moscow, is the Birmingham of Russia. The manufactories have greatly increased within a few years: in 1803 the number was 2,525, but in 1815, 3,253, of which 1,348 were of leather, 295 of cotton goods, 184 of linen, 150 of soap, &c.

Commerce.] Russia carries on an extensive commerce by land with China, Persia, and Prussia; through the ports of the Black sea with the countries on the Mediterranean, and through the Baltic with the northern and western nations of Europe. The principal exports are hemp, flax, leather, tallow, potash, wax, soap, timber, pitch, tar, peltry and iron in bars. The imports are sugar, coffee, cotton and other colonial produce; superfine woollens, cotton goods, silks, dye stuffs, wine and brandy. The value of the exports in 1805 was about \$72,000,000, and of the imports \$55,000,000. Of the exports about three fifths are the produce of agriculture; one fifth, the produce of animals; one tenth, of the forest; and the remaining tenth of the mines and fisheries.

Islands.] *Nova Zembla* is a very large island in the Arctic ocean, belonging to the Russian government of Archangel, from which it is separated by the straits of Waigatz. It extends from 69° to 76° N. lat. and is 500 miles long and 240 broad. The east coast has not yet been explored, being seldom accessible, on account of the ice by which it is surrounded. No part of this dreary and inhospitable island has any permanent inhabitants; but the south and west coasts are annually visited by hunters from Archangel who find here an abundance of bears, foxes, wild reindeer, and other animals valuable principally for their skins. The whale fishery is also prosecuted along the coast.

Spitzbergen or *East Greenland*, lies in the Arctic ocean between 76° 30' and 80° 7' N. lat. and between 9° and perhaps 22° E. lon. It extends farther north than any other land yet discovered, and is one of the most dreary and desolate regions imaginable. The principal objects which strike the eye are innumerable mountainous peaks, sharp summits or needles rising immediately out of the sea to an elevation of 3,000 or 4,000 feet, and covered with snow and ice of a dazzling brilliancy, while some of the adjoining mountains of less elevation are covered perpetually with a gloomy veil of black lichens, presenting a contrast altogether peculiar. The climate of Spitzbergen is intensely cold and more disagreeable to the feelings than that of any other country, the temperature, even in the warmest months not averaging more than 34½ degrees. The island is uninhabited, but the coasts are visited every year by the Russians and other nations engaged in the whale fishery.

The isles of *Aland*, lying at the entrance of the gulf of Bothnia, formerly belonged to Sweden, but were ceded to Russia in 1809. They are about 80 in number. *Aland*, the largest, is 40 miles long, and contains 462 square miles and 11,260 inhabitants.

KINGDOM OF POLAND.

Situation, Extent and Population.] The kingdom of Poland is bounded N. by the Prussian provinces of East and West Prussia; E. by the Russian provinces of Bialystock, Grodno and Volhynia; S. by Galicia and the free city of Cracow; and W. by the Prussian provinces of Posen and Silesia. In shape it approaches to the form of a square of 200 miles, nearly in the middle of which stands Warsaw, the capital. The area is estimated at 48,730 square miles, and the population at 2,793,000, of which number more than 200,000 are Jews.

History.] Poland was formerly a powerful country of Europe, comprehending besides the present kingdom, large tracts of country now incorporated with the Russian, Prussian and Austrian dominions. The area was estimated at 284,000 square miles, and the population at 15,000,000 souls. In 1773 this unhappy country became distracted by internal dissensions, which furnished Russia, Prussia and Austria with a pretence for interference. They accordingly took possession of a large portion of the country, and divided it between them. In 1793 they interfered a second time, and made a second partition, and in 1795 they divided the remainder and annihilated the kingdom. The following table shows the result of the whole.

	<i>Square miles.</i>	<i>Population.</i>
To Austria, - - -	64,000	4,800,000
To Prussia, - - -	52,000	3,500,000
To Russia, - - -	168,000	6,700,000
Total,	284,000	15,000,000

During the late war in Europe, various changes and transfers of territory took place, but according to the final adjustment at the Congress of Vienna in 1815, the division was as follows.

	<i>Square miles.</i>	<i>Population.</i>
To Austria, - - -	30,000	3,500,000
To Prussia, - - -	29,000	1,800,000
To Russia, - - -	177,000	6,900,000
Kingdom of Poland, - - -	48,000	2,800,000
Total,	284,000	15,000,000

Of these territories, the Prussian part is in the northwest, the Austrian in the south, the Russian in the east, and the new kingdom of Poland in the middle. Including the kingdom of Poland, the Russian portion now embraces nearly two thirds of the whole population, and more than two thirds of the territory.

Government.] This country is subject to the emperor of Russia, who in consequence takes the title of "king of Poland," but it is governed in every respect as a separate monarchy, under a liberal constitution granted by the emperor in 1815. The regal dignity is vested in a viceroy, in whom, and in a cabinet of ministers, the executive power resides. There is a diet consisting of a senate of 30 members, and a chamber of representatives of 77 deputies. The ministers are accountable to the senate, being obliged to lay reports before it, and to submit to discussions, nearly in the form observed in the British parliament.

Revenue, Army, Religion, &c.] The revenue amounts to £900,000. The army consists of 50,000 men, of whom 20,000 are cavalry. The prevailing religion is the Roman Catholic, but all others are tolerated. The principal exports are corn, hemp, flax, cattle, timber, wax and honey. The most important river is the Vistula, which passes through the kingdom from S. E. to N. W.

Chief Towns.] Warsaw, the capital, is situated on the Vistula, a little north of the centre of the kingdom in lat. $52^{\circ} 14'$ N. and lon. $21^{\circ} 3'$ E. It contains a great number of churches and convents, and many beautiful palaces of stone mixed in with a great multitude of mean wooden hovels. Here is a university established in 1816. The population is estimated at 70,000, or including Praga on the opposite side of the river, 76,000, of whom 10,000 are Jews. Lublin, 85 miles S. E. of Warsaw, is a place of considerable trade, and contains 7,000 inhabitants.

CRACOW. The free city of Cracow is situated in lat. 50° N. and lon. 20° E. in an extensive plain, at the confluence of the Rudowa with the Vistula, 128 miles S. S. W. of Warsaw, near the point where the Russian, Prussian and Austrian dominions meet. It has three suburbs, one of which, Casimir, lies on the opposite bank of the Vistula. The town is well situated for trade and is a staple city for Hungarian, Silesian, and Galician wares. The population is 25,000, of whom many are Jews. In 1815, by an act of the Congress of Vienna, Cracow, with a small territory adjacent, was constituted a free state under the protection of Russia, Prussia and Austria. The whole territory included in the new state contains 430 square miles and 61,000 inhabitants. The form of government is a democracy. The prevailing religion is the Roman Catholic, but all others are tolerated.

KINGDOM OF THE NETHERLANDS.

Situation and Extent.] The kingdom of the Netherlands is bounded N. by the German ocean; E. by Germany; S. by France, and W. by the German ocean. It extends from $49^{\circ} 30'$ to $53^{\circ} 34'$ N. lat. and from $2^{\circ} 35'$ to $7^{\circ} 5'$ E. lon. The area is estimated at 23,365 square miles.

Divisions.] The kingdom is divided into 18 provinces, the extent and population of which are given in the following table.

	Provinces.	Square miles.	Population.	Pop. on a sq. m.
North- ern or Dutch Prov- inces.	1. Friesland,	1192	176,000	147
	2. Groningen,	814	136,000	167
	3. Drenthe,	820	46,500	57
	4. Overijssel,	1342	147,000	109
	5. Gelderland,	2090	249,000	119
	6. Holland,	2256	748,000	327
	7. Utrecht,	520	108,000	207
	8. Zealand,	680	111,000	163
	9. North Brabant,	1804	294,000	162
Total in northern provinces,		11,518	2,015,000	175
South- ern or Belgic prov- inces.	10. Antwerp,	1056	293,000	277
	11. South Brabant,	1452	427,000	287
	12. West Flanders,	1496	492,000	328
	13. East Flanders,	1122	600,000	534
	14. Hainault,	1738	430,000	246
	15. Namur,	979	156,000	159
	16. Liege,	2244	354,000	157
Total in southern provinces,		11,627	3,044,000	262
18. Grand Duchy of Luxemburg, }		2,420	226,000	93
Grand total,		25,565	5,285,000	206

Face of the Country.] The face of the country is uncommonly level and low. In the northern provinces there are neither mountains nor hills to relieve the eye from the monotony of a continued flat; and from the top of a tower or steeple, the only elevation commanding an extensive view, the country appears like a vast marshy plain, intersected in all directions by an infinite number of canals and ditches. Such a prospect is not, however, altogether uninteresting: it exhibits vast meadows of the freshest verdure, and covered with numerous herds of cattle; sheets of water, sometimes flowing and sometimes stationary; while at intervals clusters of trees, and in the environs of large towns, elegant country houses, situated in the middle of gardens and parks, and decorated with statues and busts, vary and enliven the scene.

The lowest tracts of country are in the provinces along the coast, many parts of which are below the level of the sea at high water. To prevent inundation, there are along the coasts, dikes or mounds of earth which have been erected at great expense, and are justly considered as among the greatest efforts of human industry. These mounds vary in height and thickness according to their situation; they present a gradual slope on each side, and the breadth at the top is often sufficient to allow two carriages to

go abreast. The great rivers are bordered with similar dikes and provided at convenient distances with sluices, by means of which the country can be laid under water on the approach of an enemy. The Dutch have also attempted, in particular situations, to regain portions of their country from the sea, and have actually succeeded in recovering considerable tracts. These, when surrounded by a dike, admit of being drained and converted into pasture land.

In the eastern provinces, bordering on Germany, the land is somewhat higher, and contains a few elevations but none which deserve the name of mountains. The southern provinces of Hainault, Namur, Liege and Luxemburg are the most elevated portions of the kingdom, and in some parts are mountainous, particularly Luxemburg.

Seas.] The *Zuyder Zee* is a great bay of the German ocean setting up between the provinces of Holland, Utrecht, Gelderland, Overijssel and Friesland, and covering an area of more than 1200 square miles. The *Haarlem sea* is a lake in the province of Holland, 14 miles long and as many broad, communicating with the *Zuyder Zee* through the river *Y* which passes by Amsterdam.

The *Biesboch* is a large lake or arm of the sea, in the S. E. part of the province of South Holland, between Dort and Gertruydenburg. It was formed in the year 1421, by an inundation of the sea, which burst the dykes and suddenly overwhelmed 72 villages containing 100,000 inhabitants. A few islands are the only remains of this once fruitful tract. The river *Maese* passes through the lake.

Rivers.] Several navigable rivers terminate their course in this kingdom, all of which rise in other countries. 1. The *Rhine* comes from Germany and immediately on crossing the frontier divides into two great branches, the most southern of which, called the *Waal*, flows west and joins the *Maese*; the northern branch before arriving at Arnheim again divides into two streams, of which one, assuming the name of *Yssel*, takes a northerly direction, and falls into the *Zuyder Zee*, while the main branch proceeds from Arnheim to Wyk, where it once more forms two streams; the larger called the *Leck* joins the *Maese* above Rotterdam, while the branch still bearing the name of the *Rhine*, now reduced to a comparatively insignificant river, proceeds by Utrecht and Leyden to the sea. 2. the *Maese* or *Meuse* rises in France and in its progress through the Netherlands receives the *Sambre* at Namur, the *Ourthe* at Liege, the *Roer* or *Ruhr* at *Ruhrmonde*, and the *Waal* at *Loevestein*, soon after which it divides and passes under various names to the German ocean. 3. The *Scheldt* rises in France, and in its progress through the Netherlands receives the *Lys* at Ghent, the *Dender* at *Dendermonde*, at *Rupelmonde* the *Rupel* (which is formed by the union of the *Dyle* and the *Great and Little Neethe*) after which it passes by Antwerp and dividing into two principal branches, called the *East* and *West Scheldt*, forms at its mouth the islands of *Zealand*.

Canals.] It would be difficult to describe the different canals, great and small, with which the northern provinces are intersected, for they are as numerous as the public roads of other countries. The common mode of travelling is not along a road in carriages, but along a canal in large covered boats; these are drawn by horses, and though not expeditious, present a more cheap and easy method of proceeding than by land.

Climate.] The summers are warmer and the winters colder than in England, the rivers, canals, and harbors being often frozen while those of England are open. In the maritime provinces the climate is moist, variable, and owing to the numerous marshes, subject to fogs, which would become extremely noxious, were it not for the dry easterly winds of the winter months. The least healthy districts are Zealand and North Holland.

Soil and Productions.] The soil of the Netherlands is in general fruitful, the Dutch part affording rich pasture, while the Belgic part, especially Flanders, abounds with excellent corn land. There are, however, considerable exceptions: in the duchy of Luxemburg, and part of the provinces of Liege and Namur, the soil is stony and barren; North Brabant, Overijssel and Drenthe contain a number of marshes and forests; and the barren heath of Bourtrang occupies a considerable part of Groningen.

In the Belgic provinces agriculture has long been attended to with care; and this, added to an excellent soil, has rendered them one of the most productive countries of Europe. In the richest parts, the farmers leave no fallows, but raise a constant succession of crops, without any sensible diminution of the produce. The Dutch provinces do not produce much grain; their wealth consists in pasture. Large numbers of cattle are fattened here. Here also are made butter and cheese of superior quality, and in vast quantities, for export to England and other countries. The other productions, common to the southern and northern provinces, are flax, hemp, tobacco, hops, madder and fruit.

Animals and Minerals.] The domestic animals, particularly horses and cattle, are of a large size, owing, doubtless, to the richness of the pastures. The breed of sheep is good, and the wool, though inferior to that of Spain, is in considerable request. The rivers, lakes and coasts abound in fish. Of minerals, there are none in the northern provinces: turf is there the great material for fuel. In Namur and Liege there are some valuable strata of coal, which were long neglected, but are now wrought. Near Namur and throughout the mountainous part of Luxemburg are mines of iron, with some lead and copper.

Chief Towns.] Amsterdam, the largest, richest, and most populous city in the Netherlands, and after London and Hamburg the most commercial city in Europe, is situated in a low marsh on the south side of the river or inlet called Y, which connects the Haarlem lake with the Zuyder Zee. The small river Amstel, from which the city derives its name, divides it into the old or eastern and the new or western town. From the marshes

nature of the soil, it has been necessary to build almost the whole city on oaken piles driven into the ground. The streets are broad and well lighted and several of them lined with trees; and a great number of canals intersect the city in every direction. On the land side it is defended by a wall and regular bastions, with a broad and deep ditch, and by means of sluices the whole adjoining country can be laid under water at very short notice. Towards the sea it is provided with no fortifications; but the entrance to the harbor is guarded by two rows of piles, having openings at intervals for the admission of vessels; these are always shut at night. The most elegant and splendid edifice, not only in Amsterdam, but perhaps in the whole of Holland, is the stadthouse. It stands nearly in the centre of the town, on an open square, and is 282 feet long, 235 broad, and without reckoning the tower, 116 high, built principally of freestone, on a foundation of 13,659 piles, at an expense of £300,000. The commerce of Amsterdam suffered severely during the late war in Europe, and it is doubtful whether it will ever again attain its former prosperity. The population in 1817 was 230,000.

Brussels, the largest city in the Belgic provinces, and one of the most splendid in Europe, is situated in Brabant, 23 miles south of Antwerp, partly in a plain and partly on a hill, at the foot of which flows the river Senne, a branch of the Dyle. It has many elegant buildings and squares, but the chief ornament of Brussels is its public walks, no city in Europe possessing one superior to that which is called the "Green Alley," or to the great interior square called the "Park," which is a kind of public garden intersected by beautiful alleys bordered with trees and ornamented with a number of statues of white marble. The public fountains are 20 in number, and are all embellished with sculptures.

The manufactures of Brussels are celebrated throughout Europe, particularly its lace, camlets and carpets; the first alone employs nearly 10,000 individuals. Brussels is also celebrated for its manufacture of carriages, which, for cheapness and elegance, surpass those of London and Paris. The city carries on considerable trade, not only with the interior of the Netherlands, but with foreign countries, by means of the canals which bring it into communication with the Scheldt. Brussels has of late become a favorite place of resort for the English and other travellers, from its vicinity to the field of Waterloo. The population, according to a census taken in 1816, was 80,000.

Antwerp, a large and well built city of Brabant, is situated on the Scheldt, which is here 1,600 feet broad and very deep, affording a commodious haven for more than 1,000 vessels. By means of numerous canals these vessels can penetrate into the very heart of the town and there deposit their cargoes. In the sixteenth century Antwerp was the greatest place of trade in Europe, and contained 200,000 inhabitants, but the commerce

of the city was destroyed in 1648, when, by a stipulation in the treaty of Westphalia, between Spain and Holland, the navigation of the Scheldt was closed, the design of the Dutch being to turn the trade towards Amsterdam. Antwerp and Amsterdam are now under the same government, and the navigation of the river being open, commerce has begun to revive. The population of the town is 62,000, and is on the increase.

The *Hague*, a large and beautiful town, 30 miles S. W. of Amsterdam, and nearly 3 from the sea coast, was formerly the residence of the stadtholder of the Dutch provinces, and is now along with Brussels, the alternate residence of the king and his court. It is an open town, being surrounded only by a moat with draw-bridges, but in the beauty of its streets, the stateliness of its buildings, and the pleasantness of its situation, it yields to few cities in Europe. The Hague was never a place of trade; and the inhabitants have consequently little of the mercantile character of their countrymen, but more of the easy manners of fashionable life. The population in 1817 was 42,000.

Rotterdam, the most commercial city in the Netherlands after Amsterdam, is 14 miles S. E. of the Hague, on the N. bank of the Maese, which here resembles an arm of the sea, although nearly 20 miles from its mouth. It is intersected, even more than other towns in Holland, by canals, almost all of which are bordered with trees and admit vessels of large burden into the centre of the city. The population is about 56,000.

Ghent is situated 30 miles S. W. of Antwerp in a beautiful plain on the Scheldt, where that river is joined by the Lys. These rivers, with two smaller streams (the Lievre and the More) and a number of navigable canals, divide the town into no less than 26 islands, which are joined together by upwards of 300 small wooden bridges. The city contains many beautiful churches and public buildings, a university, a botanical garden and 61,000 inhabitants. The manufactures consist of fine lace, linen, and in a more limited degree, of silk and woollens, but the great branch is cotton goods, which employs 20,000 persons. Considerable commerce is carried on, which is much promoted by a canal on a large scale connecting Ghent with Bruges. The treaty of peace between Great Britain and the United States of America was signed here Dec. 24, 1814.

Liege is situated in a pleasant valley on the Maese at its confluence with the Ourthe, in the midst of a country abounding with coal and iron. It is extensively engaged in the manufacture of hardware articles, and is particularly famous for its fire-arms, both cannon and muskets. The manufacture of nails employs from 10,000 to 14,000 workmen in the town and neighborhood. The population is 46,000.

Dort, in South Holland, 11 miles S. E. of Rotterdam, is on an island formed by the Maese and the Biesboch. It carries on considerable trade particularly in wood, which is brought down the Rhine in immense floats from Germany and sold here. It is also

famous for the synod of Protestant divines which met here in 1618 and 1619 and condemned the tenets of Arminius. Population 19,400.

Ostend, the principal port on the coast of Flanders, carries on considerable trade, and is the station whence the post office packets sail regularly twice a week for Dover in England. The population is 10,500. *Bruges*, 12 miles E. of Ostend, was in the 14th century one of the greatest commercial towns in Europe, and still carries on considerable trade, for which it is finely situated, being the central point in which all the canals in Flanders meet. The population in 1816 was 45,000. *Namur*, 30 miles S. W. of Liege, at the confluence of the Sambre and the Maese, has extensive manufactures of fire arms, swords, knives, scissors, and other articles of iron, copper and brass. Population 15,000. *Louvain*, celebrated for its university, is on the Dyle, 20 miles S. E. of Antwerp, and contains 25,000 inhabitants. *Leyden*, famous for its university, is on the Rhine, 10 miles N. E. of the Hague and contains 31,000 inhabitants. *Utrecht*, on the Rhine, 18 miles S. S. E. of Amsterdam, has also an university, and is famous for two important treaties of peace signed here. It contains 35,000 inhabitants. *Luxemburg*, the capital of the grand duchy of Luxemburg, on the small river Alzeete, near the S. E. corner of the kingdom, is one of the strongest places in Europe and contains 9000 inhabitants.

Helvoetsluys, in South Holland, on the south side of the island of Voora, has an excellent harbor and extensive magazines and dock-yards for the construction and repair of ships of war. It is also the regular station for packets to England. *Flushing*, an important seaport in the island of Walcheren, on the north side of the West Scheldt, at the entrance of that river into the North sea, has a fine harbor with two basins, one of which is sufficiently deep and capacious to contain a fleet of men of war. It is a noted resort of English smugglers both in peace and war. *Middleburg*, near the centre of the island of Walcheren, 4 miles north of Flushing, has an artificial harbor, communicating with the sea by a canal 4 miles long.

Spa, 20 miles S. E. of Leige is famous for its medicinal springs, which are resorted to by the opulent from Germany, France and England. The village of *Waterloo*, famous for the battle of the 18th of June 1815, between the allied British, Belgian, and German troops under the duke of Wellington and the French under Bonaparte, is 12 miles south of Brussels.

Education.] The university at Leyden, established in 1575, has 21 professors and 300 students, a valuable botanic garden, a cabinet of natural history, an anatomical theatre, an observatory, and a library of 40,000 volumes. There are also universities of several centuries standing at Louvain, Utrecht, and Groningen; and in 1816 two new ones were established by a royal edict, one at Ghent and the other at Liege.

The means of education are very generally diffused throughout the Netherlands. In the Dutch provinces there is a regular

establishment of parish or primary schools under the protection of government; and in Belgium almost every village has a school of the same kind. The learned languages and mathematics are taught at the seminaries called royal schools, of which there is one in each large town.

Population.] The population, including the grand duchy of Luxemburg, is 5,285,000, of whom about 2,000,000 are in the northern provinces, and 3,000,000 in the southern. The Netherlands is one of the most thickly settled countries in the world, especially the southern provinces which contain on an average 262 to a square mile.

Religion.] The established religion of the northern provinces is the Calvinistic; but toleration has been so long prevalent, that religious sects of every description are to be found there. In the Belgic provinces the inhabitants are principally Catholics, and as toleration is of recent introduction there are very few of any other sect. Taking the whole kingdom together, more than two thirds of the population are Catholics.

Government.] The Dutch and Belgic provinces were formerly under separate governments, but soon after the French revolution the whole country was conquered by France and finally incorporated with her empire. In 1814 the 17 provinces were erected by the Congress of Vienna into one kingdom, with a constitution bearing a close resemblance to that of Great Britain. The royal power is vested in the family of Nassau-Orange. The title is "king of the Netherlands, prince of Orange, and grand duke of Luxemburg;" in the last capacity, he is a member of the Germanic confederation. The king possesses the whole executive power, but shares the legislative with the States general or parliament, which consists of two houses: the upper house, composed of not more than 60 nor less than 40 members, all of whom are appointed by the king and hold their seats for life; and the lower house, consisting of 110 members chosen by the different provinces.

Each province has its separate legislature, charged with a variety of important local duties, such as the care of the roads and bridges, of religious worship, of charitable institutions, and in particular with the election of the members of the lower house of the States general or parliament of the kingdom. The liberty of the press exists nearly as in England; and there are no political disqualifications on account of religious tenets. The judges are appointed by the king, and hold their places for life.

Character.] The character of the inhabitants of the Netherlands differs considerably in the northern and southern provinces. The Dutch have always been noted for their cool phlegmatic temperament, and for persevering industry. This character is owing in some measure to their natural situation, which requires continued exertion not only to obtain the means of support, but to keep the country from being swallowed up by the sea. Remarkable neatness and cleanliness in their towns, villages and houses are also characteristic of the Dutch. They have been

reproached for an avaricious calculating character, growing out of their mercantile habits, but the charge is much exaggerated. There are among them thousands of families as unconnected with trade as the aristocracy of France or England; and their mercantile men are no more strangers to the pleasures of society, than the merchants of other countries. The Belgians, in the provinces bordering on Holland, are hardly to be distinguished from the Dutch, while in the provinces to the south, the dress, language and habits of the French are prevalent.

Revenue, Debt, &c.] The annual revenue is nearly £7,000,000 and the expenditure about the same. The navy costs only £500,000 a year; the army £2,500,000; but the largest item of expenditure is the interest of the national debt. That debt amounts to £140,000,000, but the interest being in general as low as 2 or 2½ per cent. does not much exceed £3,000,000.

Army and Navy.] The army on the peace establishment amounts to above 50,000 regular troops, a large force for so small a state, but required by its exposed frontier. The navy consists of 12 ships of the line, and twice as many frigates, and a number of smaller vessels.

Manufactures.] In the 13th and following centuries the Netherlands took the lead of all the neighboring states both in trade and manufactures. The linen of Holland, the lace of Brussels, the leather of Liege, the woollens of Leyden and Utrecht, and the silks of Amsterdam and Antwerp were known several centuries ago throughout Europe. Many of these branches are still flourishing, and maintain their ancient reputation. The cotton manufactures of Ghent and the hard-ware manufactures of Liege rival those of England.

Commerce.] The commerce of this country, both internal and external, is greatly promoted by its natural situation, and was formerly more extensive than that of any other country in Europe. Being at the mouth of so many large rivers its merchants supplied the west of Germany with fish, colonial produce and manufactures, and received in return principally timber, which was floated down the Rhine in immense rafts. The carrying trade extended to almost every part of Europe; in several countries, as in Ireland, Dutch merchantmen sailing from port to port and performing all the coasting trade, at the same time from the central situation of the country, wine, brandy, fruit, and wool were brought in vast quantities from the south of Europe to supply the wants of the north, and corn, hemp, flax, iron and timber were brought from the north to supply the wants of the south. These articles were generally purchased as cheap and almost always in more convenient portions in Holland than in the countries of their growth. In the fisheries, particularly the herring fishery, the number of vessels employed by the Dutch is said to have exceeded that of all the rest of Europe. At the same time, from the possession of valuable colonies in the East and West Indies, the foreign trade extended to the most distant parts of the world. The wars in which the Dutch were successively engaged with

Spain, England and France, but above all the union of the country with France and the consequent loss of the colonies, brought all the branches of this flourishing commerce to the verge of ruin. Since the establishment of the independence of the kingdom, most of its former colonies have been restored, and commerce has begun to revive, but it will take a long time to restore it to its former prosperity.

Islands.] There are many large islands formed by the mouths of the Maese and the Scheldt, the principal of which are Walcheren, South Beveland, North Beveland, Tholen, Schouwen, Overflakkee, Voorn, Beierland, and Ysselmonde. Texel, at the mouth of the Zuyder Zee, is a large island, on the east side of which is the famous road where the Dutch East India ships assemble. The other considerable islands on the northern coast are Vlieland, Schelling, and Ameland.

FRANCE.

Situation and Extent.] France is bounded N.W. by the English channel; N.E. by the kingdom of the Netherlands; E. by Germany, Switzerland, and Italy; S.E. by the Mediterranean; S.W. by Spain, and W. by the bay of Biscay. It is remarkably fortunate in its frontier, having strong natural barriers in the Pyrenees on the side of Spain, in the Alps on the side of Italy, in the ridge of Jura on the side of Switzerland, and in the Vosges mountains and the river Rhine on the side of Germany; it is open only on the side of the Netherlands. It lies between lat. $42^{\circ} 23'$ and $51^{\circ} 3' N.$ and between lon. $4^{\circ} 40' W.$ and $9^{\circ} 3' E.$ It is 650 miles long from E. to W. and 560 broad from N. to S. The area is computed at 200,000 square miles.

Divisions.] Before the revolution France was divided into 32 provinces. At present it is divided into 86 departments. The departments are subdivided into 368 arrondissements, the arrondissements into 2,669 cantons, and the cantons into 33,990 communes.

Ancient Provinces.	Departments.	Population:	Square miles.
Flanders,	The North,	899,890	2376
Artois,	The Pas de Calais,	580,457	2794
Picardy,	The Somme,	495,058	2464
	The Lower Seine,	642,948	2519
	Calvados,	505,429	2233
Normandy,	La Manche,	583,420	2519
	The Orne,	425,920	2530
	The Eure,	421,561	2433

Ancient Provinces.	Departments.	Population.	Square miles.
Isle of France,	The Seine,	780,000	187
	The Seine and Oise,	439,972	2266
	The Oise,	383,500	2420
	The Seine and Marne,	304,068	2376
	The Aisne,	442,989	2937
Champagne,	The Marne,	311,037	3366
	The Ardennes,	275,792	2200
	The Aube,	238,819	2464
	The Upper Marne,	237,785	2992
Lorraine,	The Meuse,	284,703	2519
	The Moselle,	385,949	2640
	The Meurthe,	365,810	2541
	The Vosges,	334,169	2332
Alsace,	The Upper Rhine,	318,577	1826
	The Lower Rhine,	391,642	1936
	The Ile and Vilaine,	508,544	2838
Brittany,	The Cotes du Nord,	519,620	3036
	The Finisterre,	452,895	2882
	The Morbihan,	403,423	2816
	The Lower Loire,	407,900	3036
Maine,	The Mayenne,	332,250	2178
	The Sarthe,	410,380	2574
Anjou,	The Maine and Loire,	403,864	3058
Touraine,	The Indre and Loire,	275,292	2948
The Orlean- nois,	The Loiret,	286,153	2618
	The Eure and Loire,	265,996	2431
	The Loire and Cher,	212,552	2682
Berry,	The Indre,	204,721	2926
	The Cher,	228,158	2930
Nivernois,	The Nièvre,	241,520	2948
Burgundy,	The Yonne,	335,994	2948
	The Cote d' Or,	355,436	3432
	The Saone and Loire,	471,457	3564
	The Ain,	304,468	2266
Franche Comte,	The Upper Saone,	300,156	2000
	The Doubs,	240,792	2233
	The Jura,	292,882	2068
	The Vendee,	268,786	2860
Poitou,	The Two Sevres,	254,105	2508
	The Vienne,	253,048	2904
	The Creuse,	226,224	2332
La Marche,	The Upper Vienne,	243,195	2266
Limousin,	The Correze,	254,271	2088
Bourbonnois,	The Allier,	260,266	2882
Saintonge and Angoumois,	The Charente,	326,885	2268
Aunis and Saintonge,	The Lower Charente,	393,011	2816
Auvergne,	The Puy de Dome,	548,874	3388
	The Cantal,	251,456	2346

Ancient Provinces.	Departments.	Population.	Square miles.
Lyonnois,	The Rhone,	347,381	1188
	The Loire,	315,858	2024
	The Isere,	471,660	3542
Dauphiny,	The Upper Alps,	124,763	2266
	The Drome,	253,372	2728
	The Dordogne,	424,113	3740
	The Gironde,	514,562	4409
	The Lot and Garonne,	326,150	2244
Guyenne,	The Lot,	268,150	2156
	The Tarn and Garonne,	238,722	1562
	The Aveyron,	331,373	3674
	The Gers,	286,493	1617
	The Landes,	235,550	3828
Bearn,	The Upper Pyrenees,	198,763	1292
	The Lower Pyrenees,	383,502	3234
County of Foix,	The Arriege,	222,936	1936
Roussillon,	The Eastern Pyrenees,	126,625	1716
	The Upper Garonne,	367,551	2464
	The Aude,	240,993	2640
	The Tarn,	295,885	2188
	The Herault,	301,099	2926
Languedoc,	The Gard,	322,144	2312
	The Lozere,	143,247	2134
	The Upper Loire	268,205	1930
	The Ardeche,	290,833	2354
	The Lower Alps,	146,944	2948
Provence,	The Mouths of the } Rhone,	293,235	2112
	The Var,	283,396	4026
County of Venaissin,	The Vaucluse,	205,832	1452
Corsica,	Corsica,	174,702	3916

Mountains.] The *Pyrenees*, which separate France from Spain, run in a direction a little south of east from the bay of Biscay to the Mediterranean. They contain many lofty summits, the highest of which is Mont Perdu, which is 10,578 feet above the level of the sea. The *mountains of Lozere*, which are loosely connected with the eastern part of the chain of the *Pyrenees*, proceed in a N. E. direction to the sources of the Loire, where they divide into two branches; the northwestern branch, called the *Mountains of Auvergne*, proceeds towards the centre of France, and contains the summits of Mont d' Or, (6,233 feet,) the Cantal, (5,964 feet,) and the Puy de Dome, (4,960 feet high;) the northeastern, called the *Sevennes*, less lofty than the other, passes between the Loire and the Rhone, and proceeds as far north as the department of Cote d' Or.

On the east side of the Rhone there are several chains, more or less connected with each other. The *Alps*, called here the *Maritime Alps*, separate France from Italy. The *Mount Jura*

chain, which may be regarded as a branch of the Alps, commences near Geneva at the S.W. extremity of Switzerland, and after forming the boundary between Switzerland and France, continues its course in a northerly direction under the name of the *Vosges* as far as the parallel of 50° N. lat. The most elevated peaks in the Jura chain are the Reculet, (5,200 feet,) and the Dole (5,178 feet above the level of the sea.)

Rivers.] The four principal rivers in France are the Garonne, the Loire, the Seine and the Rhone. 1. *The Garonne* rises in the department of the Upper Pyrenees, and flowing on the whole in a N.W. direction, passes by Toulouse, Agen, and Bourdeaux, and discharges itself into the Atlantic ocean through two mouths after a course of more than 400 miles. It is three miles wide at its mouth, and frigates ascend as far as Bourdeaux. Its principal tributaries are the *Arriege*, the *Tarn*, the *Lot* and the *Dordogne*. After the junction of the Dordogne the river is called *Gironde*. 2. *The Loire*, the largest river in France, rises in the department of the Upper Loire, between the mountains of Sevennes and Auvergne, and flows at first in a northerly direction to the centre of the kingdom, where it turns to the west, and passing by Orleans, Blois, Tours, Angers and Nantes, falls into the Atlantic after a course of 500 miles. It is navigable to Nantes for vessels of 70 or 80 tons, and for boats almost to its source. Its principal tributaries are the *Allier*, the *Cher*, the *Indre*, the *Vienne*, the *Sevre-of-Nantes*, and the *Mayenne*. 3. *The Seine* rises in the department of Cote d'Or, and flowing in a northwest direction, passes by Troyes, Paris, and Rouen, and discharges itself into the English channel, after a course of 400 miles. It admits vessels of considerable burden as far as Rouen, and boats to Troyes. Its principal tributaries are the *Aube*, the *Yonne*, the *Marne*, the *Oise* and the *Eure*. 4. *The Rhone* issues from the lake of Geneva in Switzerland, and pursues a S.W. course to Lyons, where it turns to the south, and passing by Vienne, Valence and Avignon, discharges itself through three mouths into the Mediterranean. It is the most rapid river in Europe, and the upward navigation can be performed only by draught or steam. Its principal tributaries are the *Saone*, a large river from the north which joins it at Lyons, and the *Isere* and *Durance* from the east, which bring the tributary waters of the western face of the Alps.

The smaller rivers which discharge themselves directly into the sea are, the *Somme* and the *Orne*, which fall into the English channel; the *Vilaine*, the *Sevre-of-Niort*, the *Charente* and the *Adour*, which fall into the bay of Biscay; and the *Herault* and *Var*, which fall into the Mediterranean.

The principal rivers, whose course lies only partly in France are, 1. *The Escaut* or *Scheldt*, which rises in the department of Aisne, and flows immediately into the Netherlands. 2. *The Maese*, or *Meuse*, which rises in Upper-Marne, and passes by Neufchateau, Verdun, and Mezieres into the Netherlands. 3. *The Moselle*, which rises in the mountains of the Vosges, and running north across the S. E. corner of the Netherlands into Germany,

passes by Remiremont, Epinal, Metz, and Treves, and joins the Rhine at Coblenz. Its principal tributaries are the Meurthe and the Sarre. 4. The *Rhine* for a short distance forms the boundary between France and Germany.

Canals.] The following are the principal canals. 1. The celebrated *canal of Languedoc*, commenced and completed in the reign of Louis XIV. at an expense of £500,000, opens a communication between the bay of Biscay and the Mediterranean through the southern part of the kingdom. It begins on the Garonne at Toulouse and proceeds in a direction a little S. of E. to a small lake or bay communicating with the Mediterranean at Cette. It is 140 miles long, 60 feet broad, 6 feet deep, and is carried over the intervening rivers by 58 aqueducts. In one place it passes through a hill by a tunnel 500 feet long and 20 feet broad. 2. The *canal of the centre*, which connects the Saone with the Loire, and thus opens a communication between the Mediterranean and the bay of Biscay through the centre of the kingdom. 3. The *canals of Orleans and Briare* which connect the Loire with the Seine. 4. The *canal of St. Quentin*, which connects the Somme with the Oise.

Face of the Country.] The southeastern part of the kingdom and narrow tracts along the eastern and southern borders are mountainous. The rest of the country may be called uneven and in some places hilly, the surface being everywhere sufficiently varied to render the prospects interesting. Correze and the neighboring departments surpass every part of France in beauty. Hills, dales, woods, streams, lakes and scattered farms are mingled into a thousand delightful landscapes. The banks of the Seine, for 200 miles from its mouth, and of the Loire as high as Angers, are also eminently beautiful. The country east of the Rhone presents many pleasing prospects, and the course of the Isere is a scene of perpetual beauty. The Pyrenees are the most striking of the mountains, and their verdure, their forests, rocks and torrents have all the character of the sublime and beautiful.

Climate.] The eastern part of France is warmer than the western in the same parallels. Mr. Young divides the country into four climates. A line commencing a little north of the mouth of the Loire, and passing in an E.N.E. direction to the Netherlands through the department of the Aisne would leave a tract to the N.W. called the *northern climate*, in which the vine will not grow. It is considerably warmer than in England but equally moist; and produces a great variety of fine fruits. The *vine climate* is a space included between the northern climate and a line passing nearly parallel with the other, from the mouth of the Garonne to the Rhine through the department of the Meurthe. This is the pleasantest climate; the air is light, pure and elastic; and the sky is generally clear; the summer is not fervid, and the winters are mild. The *Maize Climate* is broader. Its southern boundary is a line beginning on the Pyrenees in the department of the Arriege and passing through Grenoble on the

Isere to the Alps. The vine also grows here luxuriantly. The tract S. E. of this line is called the *olive climate*. It is much the smallest, and both vines and maize grow here abundantly. This division of France, which, with here and there a set-off, is strictly accurate, points out the eastern side of the kingdom as $2\frac{1}{2}$ degrees of latitude hotter than the western, or at least more favorable to vegetation.

Soil and Productions.] The *northwestern* section of the kingdom, including the country on both sides of the Loire below Tours, and extending on the coast almost from the mouth of the Garonne to that of the Seine, has a poor and stony soil. The *northern* section, which corresponds nearly with the eastern half of the northern climate, has a rich soil, of considerable depth and of an admirable texture. The soil of the *southwestern* section is indifferent, except in the valley of the Garonne and its branches, where it consists of a deep, mellow, friable loam, with sufficient moisture for any culture. The *eastern* section, extending from the Netherlands to the Mediterranean, has a fertile soil, but is less uniformly rich than the northern.

The principal agricultural productions of the northern half of the kingdom are wheat, barley, oats, pulse, and of late in a greater degree than formerly of potatoes; in the southern half, maize, vines, mulberries, and olives. The cultivation of the vine is carried to a very great extent, the number of acres covered by the vineyards being computed at nearly 5,000,000, or one twenty fifth part of the whole kingdom. The olive has recently suffered from severe winters and the produce is scarcely one quarter of its former amount. The most important mineral is iron, which is produced in France in greater quantity than in any other country except Great Britain. Coal also exists in great quantities and the mines are very extensively wrought.

Chief Towns.] *Paris*, the capital of France and one of the finest cities in the world, is situated on the Seine, which passes through the city from east to west dividing it into two nearly equal parts. It is surrounded with a wall 17 miles in circuit. The houses are generally from 4 to 7 stories high, and built of freestone. Some of the streets are remarkably broad and beautiful. The Boulevards particularly, which occupy the space appropriated to the walls of the town in former ages, when its circumference did not exceed seven miles, are from 200 to 300 feet broad, and planted on each side with long rows of lofty trees. All the streets are lighted with reflecting lamps, suspended at a great height in the middle of the street. The finest square is the Place Vendome, an octagonal space 500 feet long and 400 broad, surrounded by elegant stone buildings. In palaces and public structures of the first rank Paris is greatly superior to London. The Tuileries, the present royal residence, is a noble and venerable structure extending from N. to S. above 1,000 feet. The Louvre, a quarter of a mile to the east of the Tuileries, is an elegant building of a square form, with a large interior court, 400 feet by 400, and its magnificent halls are used not as a royal habi-

tation, but as a depot for objects of taste and art. The gallery of the Louvre is a very long range, detached from the main building, and extending parallel to the bank of the river, all the way to the Tuileries. The most striking public monument is the Column of the Place Vendome, erected by Bonaparte to commemorate his successes in Germany in 1805. It is a great brazen pillar, 12 feet in diameter and 133 feet high, and every where covered with bas reliefs. The catacombs are subterraneous quarries, excavated in the course of ages for the building of Paris, and converted in the latter part of the 18th century into a great burying repository. They are of great extent and being easily traversed with the aid of a guide, form a prominent object of attention to travellers.

The Jardin des Plantes is a garden of an oblong form, nearly half a mile in length, laid out with great taste, and exhibiting groupes of plants of almost every country in the world. Amidst the collections of interest to artists, those of the Louvre hold the first rank. Of the ground floor of that spacious building a great part is appropriated to statues, and other specimens of sculpture, ancient and modern, distributed in spacious halls, and arranged with much taste. From these a magnificent staircase leads to the gallery of paintings, which is of such length, that the extremity is almost lost in the distance, and is lined on both sides with the finest productions of modern painters.

Paris is the centre of elegant amusements for France, even more than London for England, being the residence during the autumn and winter of all who can afford the gratifications of a town life. Of the public gardens and walks the finest and most frequented are those of the Tuileries, which extend in a beautiful oblong to the westward of the palace. They are laid out most elegantly with gravelled walks, terraces, plots of flowers and shrubs, groves of lofty trees, basins of water, and fountains, interspersed with beautiful statues of bronze and marble. This delightful spot forms the favorite walk of the Parisians, and is crowded on Sundays during the day, and in the rest of the week in the evenings with well dressed persons.

Paris is rich in libraries, which are accessible to all persons without introduction. The library of the king, the largest in Europe, contains upwards of 360,000 printed volumes, and 72,000 manuscripts. The manufactures of Paris as of London, consist chiefly of articles of taste, and such as require nice workmanship. The population of the city in 1817 was 715,000.

Lyons, the next town to Paris in population, and superior to it in commerce and manufactures, is situated on the tongue of land formed at the confluence of the Saone and the Rhone. The streets cross each other regularly at right angles, but they are in general extremely narrow and many of them dark and gloomy. The houses are usually of stone, and 5 or 6 stories high. There are 4 public squares, one of which is entitled to rank among the finest in Europe. Lyons is the first manufacturing town in France, and is particularly noted for its silks. It formerly sup-

plied a great part of Europe with silk goods, but its manufactures were greatly injured during the troubles of the French revolution. The number of looms for velvet, silk, gauze, crape and thread, was at the commencement of the revolution 9,335, and the persons employed 58,600; in 1803 there were 7,000 looms, but only 1,553 at work. The large manufactory of felt hats, which formerly employed 8,000 hands, had fallen to 1,500. Within a few years the fine silk manufactures have begun to resume their former importance. The orders for goods in 1818 could scarcely be answered, and the quantity exported in that year was valued at 60,000,000 francs. The merchants of Lyons carry on trade with Spain, Italy, Switzerland, Netherlands and almost every part of Europe. The population is estimated at 120,000.

Marseilles is situated on the Mediterranean, at the foot of a ridge of hills, which extend in the form of a crescent around the town and its environs until each extremity reaches the sea. It is divided into the Old and New Town; the latter, containing nearly two thirds of the whole, is equal in beauty to any city of France. The port, which is half a mile long and a quarter of a mile broad, occupies the centre of the town, and communicates with the sea by a narrow entrance, only 100 yards wide, defended by two forts: it is completely sheltered from all winds, but has not depth enough for ships of war. From its advantageous position and the security of its harbor, Marseilles has long enjoyed a large share of the foreign trade of France. The population is estimated at 110,000.

Bordeaux is on the left bank of the Garonne, 47 miles from its mouth. The river here forms a spacious harbor, and the tide rises to the height of 12 feet, so that large merchant vessels and even frigates can come up close to the town. The internal commerce, carried on through the Garonne and Dordogne is very extensive, and the foreign trade exceeds that of any city in France, except Marseilles. The principal exports are wine and brandy. The population is 92,374.

Rouen, situated on the right bank of the Seine, 70 miles from its mouth, in the midst of a pleasant and fertile country, is one of the principal manufacturing towns in France, especially in the article of cotton goods. The population is estimated at 87,000. *Nantes* is beautifully situated on the right bank of the Loire, 27 miles from its mouth. It has numerous manufactures and considerable foreign and inland trade, with a population of 77,000.

Cherbourg is a seaport on the north coast, at the bottom of a large bay between Capes La Hogue and Barfleur, in the department of La Manche. It has long been considered one of the most important stations of the French navy, and its improvement has from time to time, occupied the attention of the government for no less than a century and a half. More than two millions sterling were expended in an attempt to erect a breakwater against the swell of the sea, which has after all proved almost entirely fruitless. After the failure of this scheme Bonaparte de-

terminated to excavate a harbor from the solid ground. The work was prosecuted with great vigor, and by 1813 a basin was finished, 1,000 feet long, 770 wide, 50 feet deep, covering a surface of about 18 acres, and capable of containing 50 sail of the line. Bonaparte's next project was a wet dock of equal dimensions. It was begun in 1813, and is now approaching towards completion, after having cost, along with the basin (and exclusive of the breakwater) nearly five millions sterling.

Brest, the chief station of the French marine, is situated on a bay in the department of Finisterre, and has one of the best harbors in Europe. The road affords safe anchorage for at least 500 men of war. The harbor is in the form of a long canal, with a very narrow and difficult entrance, defended by strong fortifications. The town contains an immense naval arsenal, a dock-yard, ropewalks, forges, foundries, and every thing necessary for the construction and equipment of ships of war. The population is 24,180.

Toulon, the only harbor for the navy on the coast of the Mediterranean, is a strongly fortified town a little E of Marseilles. The old and new harbor lie contiguous to each other and by means of a canal communicate with one another, and each has an outlet into the spacious outer harbor, which is naturally almost of a circular figure, very large, and surrounded with hills. The entrance on both sides is defended by a fort, with strong batteries. The new harbor is an artificial basin, the work of Louis XIV. It is well defended by batteries and round it stands the arsenal, where every man-of-war has its own particular storehouse. Here are rope-walks, foundries, and magazines of all kinds of naval stores on a great scale. The population is estimated at 29,000.

The following are the principal seaports, not already mentioned. 1. *Dunkirk* is the only harbor of France on the German ocean, and being the most convenient port for receiving the merchantmen captured in time of war from the English and Dutch, it has been strongly fortified by the French government. It has considerable trade and more than 26,000 inhabitants. 2. *Calais*, 25 miles S. W. of Dunkirk and opposite Dover in England, has a small harbor too much obstructed with sand to admit large vessels. 3. *Boulogne*, on the English channel, in the Pas de Calais, is a favorite place of resort for English emigrants. The harbor was formerly one of the best on the coast but is now nearly choked up with sand. Here lay the flotilla prepared by Bonaparte in 1804 and 1805 for the invasion of Great Britain. 4. *Dieppe*, 100 miles N. W. of Paris, is on the most direct route from London to Paris, and in time of peace there are regular packet-boats between this port and Brighton, a distance of 66 miles. 5. *Havre de Grace*, the port of Paris, is a strongly fortified town at the mouth of the Seine, with a harbor capable of containing 600 or 700 vessels, and deep enough for ships of war of 60 guns. It has an extensive inland trade by means of the Seine, especially with Paris. The population is 21,000. 6. *Rochelle*, in the department of Lower Charente 80 miles S. of Nantes, is a strongly fortified seaport with

a good harbor and considerable trade. Population, 17,500. 7. *Rochefort*, on the Charente 5 miles from its mouth, has a deep and secure harbor and is one of the principal naval stations of the kingdom. 8. *Bayonne* is situated near the S. W. corner of the kingdom, at the conflux of the Nive and Adour, which here form a commodious harbor two miles from the bay of Biscay. It has considerable commerce with Spain and 12,600 inhabitants.

The following are the principal towns in the interior not already mentioned. 1. *Lisle* or *Lille*, the capital of the department of the North, is a large and strongly fortified city, with an extensive trade and various manufactures. Its citadel, the work of Vauban, is the first in Europe after that of Turin. Population in 1817, 61,500. 2. *Cambray*, famous for the manufacture of a fine species of linen which has received from this place the name of cambric, is on the Scheldt near its source, 100 miles N. N. E. of Paris, and contains 14,000 inhabitants. 3. *Amiens*, on the Somme, 40 miles from its mouth, contains 40,000 inhabitants, and is famous throughout Europe for its extensive manufactures of serge and other woollen stuffs, and also for the treaty of peace between France and England signed here in 1802. 4. *Rheims* is in the department of the Marne, on the small river Vesle a branch of the Aisne, 100 miles E. N. E. of Paris, and contains 38,000 inhabitants. The archbishop of this ancient city is the primate of the kingdom. 5. *Strasbourg* is a strongly fortified town in the department of the Lower Rhine, on the high road from France to Germany. It has a Protestant university and 50,000 inhabitants. 6. *Versailles*, a few miles S. W. of Paris, at the commencement of the last century was a small village in the midst of an extensive forest. Louis XIV. made it the royal residence, and erected here a magnificent palace, with beautiful gardens, adorned with statues, canals, fountains, and a park five miles in circumference. The population is 23,000. 7. *Orleans* is beautifully situated near the centre of the kingdom, on the N. bank of the Loire, by means of which, and the tributary streams and canals connected with it, a communication is opened with all parts of the interior. It has an extensive trade and 42,000 inhabitants. 8. *Toulouse*, on the Garonne, at the head of navigation, has a university and 48,000 inhabitants. 9. *Montpelier*, the capital of the Herault, is 100 miles W. N. W. of Marseilles, and 5 or 6 from the sea, with which it communicates by a canal. It has long been a favorite residence of invalids from England on account of the pure air and mild climate. It has considerable trade, particularly in wine, and 33,000 inhabitants. *Cette*, its port, is at the eastern termination of the famous canal of Languedoc, 18 miles distant. 10. *Nismes*, 30 miles N. E. of Montpelier, contains 40,000 inhabitants, of whom 25,000 are Protestants. It is particularly interesting from its ancient monuments, of which it is said to contain more than any other city in Europe except Rome. The town has suffered severely from the dissensions between the Catholics and Protestants in this part of France.

Population and Religion.] The population, in 1819, was 29,290,370. Of this number it is estimated that more than 25,000,000 are of French origin, 2,800,000 German, 1,000,000 British (in the ancient province of Brittany,) 100,000 Biscayan (at the foot of the Pyrenees,) 195,000 Italian, about 60,000 Jews and 10,000 gypsies. The established religion is the Roman Catholic, but all others are tolerated, and it is estimated that there are in the kingdom nearly 4,000,000 Protestants and about 60,000 Jews.

Education.] Before the revolution there were in France 23 universities; in that great convulsion, education, like every thing else, was suspended, but since the commencement of the present century a regular system of schools has been established. In the primary schools reading, writing and arithmetic are taught, and the expense is defrayed in part by a trifling fee from the pupils, and partly by an allowance from the public treasury. The secondary schools or colleges are dependent on government, and the expenses are defrayed in like manner, partly by the pupils and partly by the public. The lycées, now called royal colleges, are in number 36, and are large provincial schools, where the pupils are taught Latin, Greek, mathematics and rhetoric. Lastly come the universities. The name of university is at present confined to the institution at Paris, but the provincial establishments bearing the name of academies, are constituted like the universities of other countries. Besides these, there are private schools and separate seminaries for particular branches, among which are the two theological institutions of the Protestants at Strasbourg and Montauban. The following is the return made in 1815 of the public seminaries and number of pupils.

	<i>Seminaries.</i>	<i>Pupils.</i>
Universities, - - -	26 -	6,329
Lycées or royal colleges, -	36 -	9,000
Secondary schools, - -	368 -	22,000
Primary schools. - - -	22,300 -	737,379

It is estimated that more than one half of the population of France are unable to read and write. Many schools on the Lancasterian plan have recently been established.

The principal literary association in France is the Institute, a body composed of nearly 200 members, and divided, since 1816, into four academies. It comprises as members or correspondents, a large portion of the literary and scientific characters of the country.

Government.] The constitution of France, since 1814, resembles in its form that of Britain, the king being a limited monarch, and infallible in the eye of the law, the responsibility for public measures resting with his ministers. The royal title is "king of France and Navarre;" and females are still excluded from succession to the crown. The crown prince is called Dauphin, and the oldest brother of the king Monsieur. The royal preroga-

tive is nearly the same as in England; but in France the king exclusively has the right of bringing in bills in parliament. The opposition act there as in Britain, except that they are denied that important privilege, a denial founded on the supposed agitation which might be produced by the proposition of popular measures in a country where the constitution is as yet unsettled. The chamber of peers comprises about 200 members, who possess privileges similar to those of the peerage in England; their number is unlimited: the grant of titles is vested in the king and the dignity is hereditary. No clerical dignitaries have seats in the legislature. The house of commons or chamber of deputies are elected by the people; the number returned may in some measure be altered at the will of the king; at present it is only 256, the smallest number allowed by the constitution. The election of the deputies was at first made by an intermediate body, the voters naming a committee of electors, and the latter choosing the members. The election is now vested immediately in the people on a very simple and uniform principle, the only qualification for a voter being the payment of taxes to the amount of £12 annually. For a deputy the requisites are, that he shall be of the age of 40, and pay taxes to the amount of £40 a year. One fifth of the chamber of deputies is re-elected annually, the whole being thus changed in five years.

Administration of Justice.] The administration of justice has been entirely new-modelled and simplified since the revolution. There is a justice of the peace for each canton, an inferior court for each arrondissement, and a superior court, or provincial court of appeal in 27 of the principal towns. A justice of the peace acts nearly as the same magistrate in England; his decision is final in petty matters, such as cases below 50 francs; in others an appeal lies from him to the inferior court, which is composed of 3 or 4 judges, making above 1,000 judges of this class for the whole kingdom. Their decisions are final wherever the amount in debate does not exceed £40; in all other cases an appeal lies to the superior court. Besides these courts there are tribunals of police for the punishment of small delinquencies, and tribunals of commerce, composed of merchants who act without salary, and whose decision is final in all commercial disputes below £40. Lastly comes the *cour de cassation* or highest court in France, which is stationary at Paris, and takes cognizance of all appeals from the 27 provincial courts. The *cour de cassation* is divided into three chambers, and composed of 43 judges, with a yearly salary of nearly £500 each. There are no circuits in France, the judges being all stationary. Juries are employed in criminal cases only.

Debt, Revenue, &c.] The national debt amounts to nearly 200 millions sterling; the interest is between 11 and 12 millions. The revenue amounts to about £30,000,000, nearly one third of which is derived from a direct tax on lands and houses. The taxes in general are much lighter in France than in England, but the direct tax on real estate is considerably greater. The pro-

duce of the customs on the other hand is much smaller, the amount being scarcely one twentieth part of the whole revenue.

Army and Navy.] The French army, which under Bonaparte, was in peace above 400,000, and in war nearly 600,000 effective men, is now in a very different condition. Many of the old soldiers perished in the disastrous campaigns of 1812, 1813, 1814 and 1815; others received their discharge, in consequence of their attachment to their late commander, and though the army on the peace establishment amounts nominally to 250,000 men, considerable difficulty has been experienced in raising half that number. The navy consists of about 40 ships of the line and 40 frigates, but very few of them are in commission.

Manufactures.] In manufactures the French have long been noted for the fineness and durability of their woollens: linen also is a staple article, particularly in the north of France. In hardware they are greatly deficient; but in silk they support, particularly at Lyons, their former reputation. The cotton manufactures are of recent introduction and maintain with difficulty a competition with England. The manufactory of plate glass for mirrors at St. Gobin, in the department of the Aisne, is well known as the first in Europe.

Commerce.] The natural situation of France on two seas, its many navigable rivers and the canals with which they are connected, the fine roads which intersect the country in every direction, the natural riches of the soil and the industry of the inhabitants greatly promote its commerce. The foreign trade extends to every part of Europe, the Levant, the north coast of Africa, the East Indies, China, the United States of America and the West Indies. The principal exports are wine, brandy, woollen and linen goods, and silks. Since the loss of St. Domingo the foreign trade and navigation have declined, but the internal commerce is as active as ever. There is very little paper money in France; almost all business being transacted by gold and silver. The amount of the precious metals in circulation is estimated at the enormous sum of 80 millions sterling.

Islands.] *Corsica*, one of the largest islands in the Mediterranean, lies between the coasts of France and Italy, and is separated from the island of Sardinia on the south by the strait of Bonifacio. It is 110 miles long and contains 4300 square miles and 174,702 inhabitants. The mountains, with which the island is covered, rise to a great height, and some of the summits are covered with snow during the greater part of the year. The soil is productive in corn, excellent wines, oranges, lemons, figs and other fruits. The principal towns are *Bastia*, on the N. E. coast of the island, *Bonifacio*, at the southern extremity, and *Ajaccio*, the birth-place of Napoleon Bonaparte, on a bay of the same name on the western coast.

There are several small islands on the coast of France, the principal of which are the *isle of Oleron*, a little north of the mouth of the Gironde; the *isle of Re*, a little further north and opposite Rochelle; *Bellisle*, opposite the mouth of the Vilaine,

and *Ouessant* or *Ushant*, remarkable as the farthest headland of France towards the west, being about 12 miles from the continent.

SWITZERLAND.

Situation and Extent.] Switzerland is bounded N. and E. by Germany; S. by Italy and W. by France. It lies between 45° 45' and 47° 48' N. lat. and between 6° 6' and 10° 36' E. lon. The area is estimated at 19,000 square miles.

Divisions.] Switzerland formerly consisted of 13 cantons, with their allies and subjects. In 1803, the constitution underwent a considerable change, and the country was formed into 19 cantons. In 1815, 3 new cantons were added by the Congress of Vienna, making the whole number at present 22, as in the following table.

Cantons.	Square miles.	Population.	Pop. on a sq. m.	Religion.
1. Schaffhausen,	176	30,000	170	Protestant.
2. Thurgau or } Thurgovia, }	366	76,700	206	Prot. and Cath.
3. Zurich,	990	182,000	184	Protestant.
4. Aargau or } Argovia, }	792	143,960	181	Prot. and Cath.
5. Bale or Basil,	275	47,200	171	Protestant.
6. Soleure,	286	47,882	167	Cath. and Prot.
7. Lucerne,	792	100,000	126	Catholic.
8. Zug,	121	14,300	118	Catholic.
9. Schweitz,	484	28,900	59	Catholic.
10. St. Galle,	880	130,300	180	Prot. and Cath.
11. Appenzell,	231	55,000	238	Cath. and Prot.
12. Glarus,	467	24,000	51	Cath. and Prot.
13. Uri,	528	14,000	26	Catholic.
14. Underwalden,	286	21,200	74	Catholic.
15. Berne,	3,784	291,200	77	Protestant.
16. Friburg,	506	70,000	138	Catholic.
17. Pays de Vaud } or Leman, }	1,540	150,000	97	Protestant.
18. Tesino,	1,177	88,793	75	Catholic.
19. Grisons,	3,080	73,200	23	Prot. and Cath.
20. Valais,	2,024	63,400	31	Catholic.
21. Geneva,	132	47,800	362	Protestant.
22. Neufchatel,	330	50,800	154	Protestant.
Total,	19,000	1,750,000	92	

Mountains.] The principal chain of the Alps passes through the country in a northeasterly direction and with its numerous branches overspreads all the southern cantons. In different parts of its course it has different names. 1. The most southern division, called the *Pennine Alps*, comes from Italy, and entering Switzerland at its S. W. corner, runs along the southern border of the canton of Valais as far as Mount Rosa. It passes over the summits of Mont Blanc (which is in Italy, and 14,676 feet high,) the great St. Bernard (10,380 feet high,) Mount Combin, Mount Cervin and Mount Rosa (13,428 feet high.) 2. The *Lepontine Alps* stretch themselves from Mount Rosa over Mount Simplon (6,597 feet high,) the Griesburg and Mount St. Gothard (9,964 feet high,) to Mont Bernhardin, in the canton of the Grisons. A branch of the Lepontine Alps proceeds from Mount St. Gothard in a W. S. W. direction almost to the lake of Geneva, occupying the southern part of the canton of Bern and the northern part of the Valais, and containing among many others the summits of the Furca, the Schreckhorn, the Viescherhorn, the Jungfrau, all of which are more than 12,000 feet high. 3. The *Rhaetian Alps* commence at Mont Bernhardin at the eastern termination of the Lepontine Alps, and extend into Germany, after throwing off many branches both to the north and south which overspread the whole canton of the Grisons.—The Mount Jura chain forms the boundary between Switzerland and France.

Rivers.] The two principal rivers are, 1. The *Rhine*, which rises in the Lepontine Alps, a little to the east of Mount St. Gothard, and flowing at first in a N. E. direction passes the town of Coire or Chur, where it begins to be navigable, and then, turning to the north, forms for a short distance the eastern boundary of Switzerland, and falls into the lake of Constance. Issuing from that lake with a copious current it flows west, forming the boundary between Switzerland and Germany till it reaches Bale, where it turns to the north, and leaves the country. Its principal tributary from Switzerland is the *Aar*, which rises a little west of Mount St. Gothard, and flowing in a N. W. direction through the lakes of Brienz and Thun, passes by Berne, and soon after turns to the N. E. and receiving the *Great Emmen*, the *Reuss*, and the *Limmat*, falls into the Rhine in the canton of Aargau. 2. The *Rhone*, which rises at the foot of Mount Furca, not far from Mount St. Gothard, and flowing in a W. S. W. direction through the canton of the Valais, discharges its turbid waters into the transparent lake of Geneva. Issuing from that lake in a purer stream, it flows south and forms for some distance the boundary between France and Savoy.

Lakes.] The principal lakes are, 1. The *lake of Geneva*, which is 50 miles long and in its widest part 10 broad, and is surrounded with the most magnificent scenery, the north bank being fertile and beautifully diversified, while the south rises gradually until it terminates in the loftiest summits of the Alps. 2. The *lake of Constance* or *Boden See*, 35 miles long and 12 broad, has fertile and well cultivated banks, lined with beautiful towns, vil-

lages and castles. 3. The lake of *Neufchatel*, in the west of Switzerland, about 20 miles long and 4 broad.

There are many small lakes in the interior, the principal of which are the lake of *Zurich*, in the canton of the same name, which discharges itself through the *Limmat* into the *Aar*; the lakes of *Zug* and *Lucerne*, in the cantons of the same name, through the last of which the river *Reuss* passes; and the lakes of *Brientz* and *Thun*, through both of which the river *Aar* passes. In the southern part of the canton of the Grisons is the lake of *Lugano* which discharges itself through the small river *Tresa* into the lake of *Maggiore*. The lake of *Maggiore* lies partly in Switzerland, but principally in Italy. It receives the *Tesino*, *Maggiore*, and several other rivers from the eastern face of the *Lepontine Alps*.

Face of the Country.] The southern part of Switzerland is covered with mountains, whose barren, inaccessible summits pierce the region of perpetual snow. The northern cantons contain an agreeable mixture of lofty mountains, rugged rocks, green hills, fertile vales, beautiful pastures and finely cultivated fields. The lakes and mountains of Switzerland everywhere give a wonderful sublimity and beauty to the scenery.

Climate.] The climate is very different in different parts. In the proper Alps it is cold, rough and unfriendly; in the southern vallies the climate resembles that of Italy, and in the northern cantons that of the neighboring parts of France and Germany, yet on account of the many mountains and lakes it is extremely variable.

Soil and Productions.] The soil in the vallies is deep and in some parts very fertile, particularly on the *Aar*; in the mountains it is very thin and so barren that cultivation is very rarely attempted. The vine is cultivated with success, principally in the cantons of *Berne*, *Schaffhausen* and the *Pays de Vaud*. Of all kinds of fruit there is an abundance, and corn, hemp and flax are cultivated to a considerable extent though not in sufficient quantities for the supply of the country. But the principal occupation of the Swiss farmer is the raising of cattle, particularly horned cattle, and most of the fertile land is used for meadow and pasture. In mineral productions Switzerland is not so rich as might be expected from its mountainous situation. For salt it is almost entirely dependent on France and Germany.

Natural Curiosities.] The glaciers of the Alps are immense fields of ice, unrivalled in their extent and magnificence. The peaks and ridges of the higher summits are overspread with perpetual snow and ice, which reach often a great distance down the mountains, even to the borders of the cultivated vallies. These immense masses resting on an inclined plane, and often feebly supported, sometimes slide down the declivities, and in a moment overwhelm the villages and hamlets below. They are usually intersected by numerous deep fissures and chasms, which present to the eye a thousand fantastic shapes of walls and pyramids, houses and temples, cascades and torrents. In some places the ice is

of a splendid white ; in others of a beautiful azure, and everywhere transparent and dazzling.

Chief Towns.] *Geneva*, the largest town in Switzerland, is situated at the western extremity of the lake of Geneva, on the confines of France and Savoy, and is divided by the Rhone into three parts connected together by beautiful bridges. Nothing can be more agreeable than the environs of Geneva. There are beautiful and interesting walks around the city in every direction, and the lake, the hills, the distant Alps covered with eternal snow, and above all, Mont Blanc, rearing its lofty head to the clouds, give a wonderful beauty and sublimity to the prospect. The number of inhabitants is 22,800. This population would naturally place it among European towns of the third or fourth rank, but it has acquired a celebrity equal to that of the first capitals. It owes this degree of reputation principally to its industry, and the civil and religious habits and institutions of its people. The great occupation of the inhabitants is watch-making, which employs nearly 7,000 individuals ; and a great part of the continent is supplied with watches from this place. Education has always been conducted here with the greatest care ; and for this purpose there is a university with 22 professors and usually about 1,000 students.

Bâle or *Basil* is in the N. W. corner of Switzerland, on the Rhine, which divides it into two unequal parts, connected together by a bridge 600 feet long. It has 15,000 inhabitants, and a flourishing commerce maintained chiefly by the manufacture of silk ribbons. *Berne* is situated in a beautiful and fertile country on the Aar, which forms part of the town into a peninsula. It has 13,000 inhabitants. *Zurich* is a walled town on the Limmat, which here issues from the lake of Zurich and divides the city into two parts. It has 11,000 inhabitants, and a flourishing commerce maintained by the manufacture of silk and cotton goods. *Lausanne*, the capital of the Pays de Vaud, is delightfully situated on three eminences a mile from the north shore of the lake of Geneva. It has long been the resort of strangers, who are attracted hither by the picturesque scenery presented by the lake and the surrounding mountains, by the institutions for education, and by the polished character of the society. It contains 8,000 inhabitants. *Schaffhausen* is 50 miles E. of Bâle, on the N. bank of the Rhine, over which there is a wooden bridge of very ingenious construction. The transit trade of this place has been for many ages considerable, owing to its situation about a league above the celebrated cataract of the Rhine, which requires that all the articles brought down the river should be landed here and conveyed round the falls. The population is 6,000. *Lucerne* is situated in a romantic country, on the Reuss, where it issues from the lake of Lucerne. It is on both sides of the river, and its two parts are connected by four bridges. The population is nearly 7,000. *Neufchatel* is pleasantly situated on the west bank of the lake of Neufchatel and contains 5,000 inhabitants. *St. Gall*, the capital of the canton of the same name, is the centre of the com-

merce and manufactures of all the surrounding cantons. Cotton and linen stuffs are made here of an extreme fineness, and the inhabitants have carried spinning and other machines to almost as great perfection as the English. The population is 9,000.

Mountain Passes.] There are several roads or passes across the Alps from Switzerland to Italy, the principal of which are, 1. The road over the Great St. Bernard between its two main summits. On the most elevated point of this passage (which is 8,038 feet above the sea,) is a Bernardine monastery and hospital, founded in the 10th century. The monks entertain all strangers gratis for three days, and in foggy or tempestuous weather, they send their servants to all parts of the mountain, in order to be at hand to give succor to travellers who may have lost their way. The French army under Bonaparte crossed this mountain, with its artillery and baggage, in the year 1800. 2. The road over Mount Simplon, which was finished in 1805 at the joint expence of France and the kingdom of Italy, in the reign of Bonaparte. It was a work of great labor and occupied several years. It is 36 miles long, 25 feet broad, and passes over 264 bridges, and through no less than six galleries, or passages cut through the superimpending rocks. The highest point of the road is nearly 6,000 feet above the level of the sea. 3. The road over Mount St. Gothard, which is from 10 to 12 feet broad, and well paved with granite. In one place it passes over the Devil's bridge which consists of a single arch over the Reuss, resting on each side on peaks of rock at so great an elevation above the torrent as to appear a work almost superhuman. In another part there is a gallery or subterraneous passage cut through the rock, 200 feet long, 12 feet high and 12 feet broad.

Population, Language, Religion, &c.] The population is 1,750,000. A majority of the inhabitants speak the German language, the French prevails in the southwestern provinces, the Italian in the canton of Tesino, while in the country of the Grisons more than half the population speak the Romansh or ancient Rhaetian language. The religion is partly Catholic and partly Protestant. The Protestants on the whole are the most numerous and consist principally of Calvinists, although there are many Lutherans. Common schools are universally established, and there are universities at Geneva and Bâle, and colleges at Berne and Zurich.

Government.] Switzerland is a federal republic, the 22 cantons being united under one government for the protection of their liberty, independence and security against the attacks of foreign powers, and for the preservation of internal tranquillity. The affairs of the confederacy are entrusted to a diet composed of ambassadors from the respective cantons. The diet is empowered to declare war, to make treaties with foreign powers, to adopt the necessary measures for the internal security of the confederacy, and to regulate the organization of the military contingent. When the diet is not in session the direction of affairs is entrusted to a substitute. The substitutes are the cantons of Zurich, Berne and

Lucern, each alternately, for two years at a time. The diet assembles in the capital of the canton, which for the time being, is the substitute. In the decision of all questions each canton has one vote. There is no standing army, but when an army is wanted, each canton furnishes a certain number of soldiers according to its population, the contingent being two men for every 100 souls. Each canton also contributes to the public treasury a fixed proportion of the revenue. All powers not expressly delegated to the diet are reserved to the cantons respectively, each of which is an independent state, having its own constitution. Some of the cantons are aristocratical and others democratical republics. Neuschâtel belongs to the king of Prussia, but has a republican constitution.

Manufactures and Commerce.] The Swiss are a very industrious people, particularly in the northern and western cantons. The principal manufactures are cotton and silk goods, which are of a very fine quality and employ many laborers; and next to these in importance are paper, lace, linen, and watches. With these manufactures and with cheese, butter, and black cattle the inhabitants carry on an active trade with Germany, Italy and France. The principal places of trade are Geneva, Zurich, Schaffhausen, Basil, Berne and St. Galle.

GERMANY.

Situation, and Extent.] Germany is bounded N. by the North sea, the kingdom of Denmark (from which it is separated by the river Eyder) and the Baltic; E. by the Prussian provinces of West Prussia and Posen, the kingdom of Poland, the free city of Cracow, and the kingdoms of Galicia and Hungary; S. by the gulf of Venice and Italy; S.W. by Switzerland, and W. by France and the kingdom of the Netherlands. It extends from 45° to 55° N. lat. and from 5° 40' to 19° 20' E. lon. The area is computed at 256,000 square miles.

Divisions.] Germany, or the country united under the Germanic confederation, embraces the greater part of the dominions of the king of Prussia, about one third of the dominions of the emperor of Austria, the dutchies of Holstein and Lauenburg, belonging to the king of Denmark; the grand duchy of Luxemburg belonging to the king of the Netherlands; the kingdom of Hanover, of which his Britanic majesty takes the title of king; together with 30 independent states, governed by native German princes, and four free cities. The extent, population and revenue of each are given in the following table.

States.	Sq. miles.	Population in 1818.	Pop. on a sq. mile.	Revenue in pounds sterling.
1. Austria,	80,894	9,482,227	117	£6,370,000
2. Prussia,	71,324	7,923,439	111	4,300,000
3. Bavaria,	31,966	3,560,000	111	1,800,000
4. Wirtemberg,	8,118	1,395,463	172	1,000,000
5. Hanover,	15,004	1,305,351	87	900,000
6. Saxony,	7,436	1,200,000	161	850,000
7. Baden,	5,984	1,000,000	167	550,000
8. Hesse-Darmstadt,	4,246	619,500	146	370,000
9. Hesse-Cassel,	4,422	540,000	122	380,000
10. Holstein and Lauenburg, }	3,619	360,000	100	200,000
11. Mecklenburg- Schwerin, }	4,928	358,000	73	150,000
12. Mecklenburg- Strelitz, }	902	71,769	79	50,000
13. Nassau,	2,225	302,767	136	176,000
14. Oldenburg,	2,640	217,769	82	150,000
15. Luxemburg,	2,420	214,058	88	120,000
16. Brunswick,	1,562	209,600	134	180,000
17. Saxe-Weimar,	1,450	201,000	138	150,000
18. Saxe-Gotha,	1,188	185,682	156	150,000
19. Saxe-Coburg,	594	80,012	134	55,000
20. Saxe-Meinungen,	400	54,400	136	35,000
21. Saxe-Hildburg- hausen, }	240	27,706	115	20,000
22. Schwartzburg- Rudoistadt, }	484	53,937	111	22,000
23. Schwartzburg- Sonderhausen, }	506	45,117	89	25,000
24. Lippe-Detmold,	440	69,062	157	50,000
25. Schaumburg-Lippe	220	24,000	109	18,000
26. Anhalt-Dessau,	374	52,947	141	60,000
27. Anhalt-Bernburg,	352	37,046	105	30,000
28. Anhalt-Cothen,	330	32,454	98	23,000
29. Reuss-Lobenstein,	475	52,205	109	29,000
30. Reuss-Greiz,	154	22,255	144	13,000
31. Waldeck,	477	51,877	109	40,000
32. Hohenzollern- Sigmaringen, }	440	35,360	80	30,000
33. Hohenzollern- Hechingen, }	110	14,500	131	8,000
34. Hesse-Homburg,	132	20,000	151	17,000
35. Lichtenstein,	55	5,546	100	3,000
<i>Free cities.</i>				
Hamburg,	140	129,800	927	120,000
Bremen,	77	48,500	629	40,000
Frankfort,	110	47,850	435	60,000
Lubeck,	120	40,650	338	30,000
Total,	256,000	20,091,849	118	£18,646,000

Situation of the States.] The Austrian part of Germany, which includes Bohemia, Moravia, the Tyrol, &c. is in the S. E. and covers nearly one third of the whole territory. The Prussian dominions are in two detached portions; the eastern, and much the largest division, occupies the N. E. part of Germany, the western division lies on both sides of the Rhine and borders upon the kingdom of the Netherlands. Bavaria, Wirtemberg, and Baden occupy the S. W. quarter of the country. Hanover, Holstein and Mecklenburg are in the N. W. Saxony is in the east, between the Prussian and Austrian dominions. Anhalt is surrounded by the Prussian territories, and Oldenburg by the kingdom of Hanover. Almost all the other states lie between the two divisions of the Prussian dominions.

Mountains.] The most mountainous section of Germany is in the S. E.; the part of Austria which lies south of the Danube being almost entirely covered with numerous branches of the Alps, which traverse the country under various names from Switzerland to the borders of Hungary.

The *Sudetic chain* is a branch of the Carpathian mountains. It commences on the borders of Hungary, and proceeding at first in a N. W. direction separates Silesia from Moravia and Bohemia, and then turning to the S. W. separates Saxony from Bohemia. The part which separates Silesia from Bohemia is called also the *Riesengebirge* or Giant Mountains, and the part which separates Saxony from Bohemia the *Erzgebirge* or *Metallic mountains*. The *Fichtelgebirge*, a continuation of the Sudetic mountains, proceeds for a short distance in a westerly direction along the northern frontier of Bavaria, but soon turning to the N. W. passes through the territories of the house of Saxe and a part of the Prussian dominions under the name of the *Thuringerwald*. The *Hartz* mountains, which occupy the southern part of the kingdom of Hanover and the adjacent portion of the Prussian dominions, are the most northerly mountains in Germany, and may be regarded as a continuation of the Thuringerwald. From the Hartz a chain proceeds in a westerly direction, under various names, across the western division of the Prussian dominions to the Rhine.

From the western termination of the Sudetic chain a branch proceeds in a S. E. direction and separates Bohemia from Bavaria, under the name of the *Bohmerwald*, after which it turns to the S. W. separating Bavaria from Austria and connects itself with a branch of the Alps at Salzburg.

From the Thuringerwald a branch proceeds in a S. W. direction under various names along the eastern frontiers of Hesse Cassel and Hesse Darmstadt, and through Wirtemberg and Baden to the S. W. corner of Germany. The part which lies in Baden and Wirtemberg is called the *Schwarzwald* or Black Forest. A branch of the Schwarzwald proceeds along the southern frontiers of Wirtemberg and Bavaria, and is connected with the Alps at Salzburg.

The *Vosges* mountains, which lie principally in France, penetrate for a short distance into that part of Germany lying west of the Rhine. Bohemia is separated from Moravia by a chain of mountains, sometimes called the Moravian mountains.

Face of the Country.] The northern half of Germany is generally level, the southern half mountainous. All the country lying north of the chain of mountains which runs from Hungary to the Rhine under the names of Riesengebirge, Erzgebirge, Fichtelgebirge, Thuringerwald, Harz, &c. consists of immense plains. This tract includes the great eastern division of the Prussian dominions, Mecklenburg, Holstein and Lauenburg, the kingdom of Hanover, Oldenburg, Brunswick, Anhalt, a part of Saxony and a part of the territories of the house of Saxe. Along the shores of the Baltic and the North sea, the land is so low that expensive dikes or mounds are necessary to protect the country from inundation.

In the southern half of Germany. Bohemia forms a valley or basin surrounded on all sides by high mountains, having the Erzgebirge on the N. W. the Riesengebirge on the N. E. the mountains of Moravia on the S. E. and the Bohmerwald on the S. W. The only opening is in the north where the Elbe passes into Saxony after having received the waters of all parts of the valley. Bavaria, together with a part of Wirtemberg, forms another basin surrounded by mountains, having on the N. the Fichtelgebirge, on the N. E. the Bohmerwald, on the S. W. the Schwarzwald, on the S. and S. E. the chains which proceed from the Bohmerwald and Schwarzwald and unite at Salzburg, and on the W. the chain which connects the Thuringerwald with the Schwarzwald.

Rivers.] The five principal rivers of Germany are the Oder, the Elbe, the Weser, the Rhine and the Danube. 1. The *Oder*, rises in Moravia in the mountains on its N. E. frontier, a little above Odrau, and flowing in a N. W. direction through Silesia and several other Prussian provinces, passes by Ratibor, (where it becomes navigable) Oppeln, Breslau, Frankfort and Stettin, and discharges itself into the Baltic through three mouths, which inclose between them the two islands of Wollin and Usedom. It is navigable to Breslau for vessels of considerable burden. Its principal tributaries are the *Oppa*, the *Neisse*, the *Bartsch*, the *Bober*, and the *Warthe*. 2. The *Elbe* rises in Bohemia in the Riesengebirge mountains, and after receiving the *Iser*, the *Moldau*, and the *Eger*, which bring with them the tributary waters of the whole valley of Bohemia, pierces through an opening in the Erzgebirge mountains on the northern boundary, and flows in a N. W. direction through Saxony, Prussia and Anhalt, and separating Hanover from Mecklenburg, Lauenburg and Holstein, discharges itself by a broad mouth into the North sea, after a course of 500 miles. The most important towns on its banks are Dresden, Meissen, Torgau, Wittenburg, Magdeburg, Hamburg, and Gluckstadt. It becomes navigable after the junction of the Moldau in Bohemia; below Hamburg the navigation is difficult on account of the numerous sand-banks. Its principal tributaries after leaving Bo-

hemia are the *Schwartz Elster*, the *Mulde*, the *Saale*, and especially the *Havel*, one of whose tributaries is the *Spree*. 3. The *Weser*, which is formed by the union of the *Fulda* and *Werra* at Münden, near the southern extremity of the kingdom of Hanover, flows in a direction west of north between Hanover and Hesse Cassel, Brunswick and the Prussian territories, and then through Lippe, the centre of Hanover, the free city of Bremen, and along the eastern boundary of Oldenburg till it discharges itself into the North sea. Its principal tributaries are the *Aller* and *Hunte*. 4. The *Rhine* rises in Switzerland and terminates in the kingdom of the Netherlands, but the intermediate part of its course is in Germany. At first it forms the boundary between Germany and Switzerland and then between Germany and France, but afterwards it runs wholly in Germany, forming the boundary between Baden and a detached territory of Bavaria, and passing through Hesse Darmstadt and the great western division of Prussia. The principal tributaries which it receives in Germany are the *Neckar*, which rises in the Schwarzwald, receives the tributary waters of the northern half of Wirtemberg and falls into the Rhine at Mannheim; the *Maine*, which rises in the Fichtelgebirge, in the N. E. part of Bavaria, and running west receives the *Regnitz* from the south, and in its zigzag course passes by Schweinfurt, Wurzburg, Aschaffenburg, Hanau, and Frankfurt, and discharges itself into the Rhine opposite Mentz; and the *Moselle*, which rises in France and running through Luxemburg and the Prussian territories joins the Rhine at Coblenz. The principal towns on the Rhine in Germany are Mannheim, Worms, Mentz, Coblenz, Bonn, Cologne, and Dusseldorf. 5. The *Danube* rises in the Schwarzwald in Baden, near the S. W. corner of Germany, and flowing at first in a N. E. then in a S. E. and afterwards in an easterly direction, passes through Wirtemberg, Bavaria and Austria into Hungary. Among the towns on its banks are Sigmaringen, Ulm, (where it becomes navigable) Ingolstadt, Regensburg or Ratisbon, Passau, (where it passes through the mountains) Linz, and Vienna. Its principal tributaries from the south are the *Iller*, the *Iser*, the *Inn*, and the *Enns*: from the north the *Altmuhl*, the *Regen*, and the *Morava* or *March* which brings the tributary waters of nearly the whole of Moravia.

The principal streams which are not tributary to either of the five great rivers are, 1. The *Ems*, which rises in the Prussian territories, and flowing north through the kingdom of Hanover, discharges itself a little below Emden into the bay of Dollart at the N. W. corner of Germany. 2. The *Trave*, in Holstein, which passes by Lubeck and discharges itself into the Baltic at Travemünde. 3. The *Reckenitz*, which forms the boundary between Mecklenburg and Pomerania and discharges itself into a bay of the Baltic.

Climate.] The climate of the different parts of Germany depends not simply on the latitude, but also on the situation in reference to the great mountain ranges which intersect the country;

the tracts on the northern declivities of the mountains being generally much colder than those on the opposite side. The northern division, which lies at the foot of the Sudetic, Thuringerwald and Hartz mountains, and extends to the Baltic and German ocean, has a cold moist climate, unfriendly not only to the vine and southern fruits, but also to many of the more delicate grasses. The country on the south side of these mountains on the other hand, including Bohemia, a large part of Bavaria, the vallies of the Maine, the Neckar, and the Danube, has a mild climate, favorable to the growth of the vine, tobacco, and other plants which require a warm dry air. The valley of the Rhine, from the mouth of the Maine to the kingdom of the Netherlands, has a similar climate. On the other hand, the southern parts of Wirtemberg, Bavaria and Austria, lying on the northern side of the mountains which here extend under various names from Baden to Hungary, have a climate colder than that of the centre of Germany, but much more mild than that of Prussia, Saxony and the other countries in the north of Germany.

Soil and Productions.] The soil is very various: sandy plains and barren heaths abound in the northeast, swamps and marshes in the northwest, but many of the interior and southwest parts are uncommonly fertile. The districts best fitted for pasture are in the N. W. particularly Oldenburg, Mecklenburg, Holstein and some parts of Hanover, and here accordingly, are found fine horses and oxen. Sheep are more generally diffused, and in Saxony, where they have been improved by mixture with the Merino breed, the wool is said to be equal to the finest of Spain. Wine, though less generally made in Germany than in France, is very good in particular districts. Vineyards are found all along the banks of the Rhine from Basel to Mentz; in the vallies of the Maine, the Neckar, and the Moselle, in Bohemia and some of the other Austrian provinces. Wheat, barley, oats and other kinds of grain are almost everywhere raised in sufficient quantities for home-consumption, and in many districts there is a superabundance. Flax, hemp, hops and madder are also extensively cultivated.

Minerals.] Iron, copper, tin, lead, silver, cobalt and bismuth are all supplied by the Erzgebirge chain in Saxony, and by the Hartz mountains in Hanover and Prussia. Fullers' earth and porcelain clay are found in the part of Saxony adjacent to Dresden, and form the basis of extensive manufactures. The mountainous provinces south of the Danube abound in iron. The mines of Idria, in the southern part of Austria, yield annually 5,000 cwt. of quicksilver. There are very rich salt mines in the vicinity of Salzburg. Coal is wrought in Saxony, the western division of Prussia, and in other provinces, but in many parts its place is supplied by peat or turf, and in the south the great majority of the coal mines are not wrought.

Population.] The population of Germany, according to the official return in 1818, was 30,091,849. In respect to rank, the inhabitants are divided into 3 classes; the nobility of different

gradations; burghers, with various privileges; and peasants, who are generally free, but in some states are still in bondage. In some states also the clergy form a distinct class, and as such are represented in the state diets.

Religion.] In respect to religion the inhabitants are divided into 1. Catholics, more than 15,000,000. 2. Lutherans, more than 12,000,000. 3. Calvinists, 2,200,000. 4. Jews, 182,000. 5. Heretics, 25,000. 6. Greeks 14,000. Liberty of conscience has been for some time enjoyed in most of the states, but the Jews are in general under considerable restrictions. The Catholics are found principally in the south of Germany and the Protestants in the north.

Education.] There are at present 21 universities in Germany, of which 13 are Protestant, 6 Catholic and 2 partly Catholic and partly Protestant. The most celebrated are those of Gottingen in Hanover, Leipsic in Saxony, Halle in Prussia, and Jena in Saxe Weimar. The total number of students at all the universities is between 8,000 and 9,000. Gottingen is the most numerously attended, having above a tenth of the whole. Saxony is more distinguished for literature than any other part of Germany. The Catholic countries in the south, on the other hand, are remarkably deficient.

Literature.] Germany is the only country in the world where studying with a view to publish is the settled business of a life, and where authorship is considered a source of regular income. The number of new books annually published is far beyond that of any other country in Europe. The character of German literature has of late been much discussed. It seems to be generally admitted, however, that in every thing which requires indefatigable research, and scrupulous accuracy, the Germans excel all other nations. No nation has produced such a number of good statistical works. They can also boast of a greater number of useful discoveries and inventions in the arts and sciences than any other people. We are indebted to them for the art of printing, and the invention of gunpowder and time-pieces.

Government.] Germany was formerly an empire, and contained above 300 secular and ecclesiastical princes, each independent in the administration of his own territory, but subject to the emperor as head of the empire. During the late convulsion in Europe, the empire was dissolved, and most of the lesser princes were deprived of their power, so that the number of independent states is now only 39 including the free cities. In 1815 a new confederation was formed, called 'the confederation of the sovereigns and free towns of Germany.' It includes the emperor of Austria and the king of Prussia for their German dominions, the king of Denmark for Holstein and Lauenburg, and the king of the Netherlands for the grand duchy of Luxemburg.

The object of the confederacy is the maintenance of the external and internal security of Germany, and the independence and inviolability of the separate states. The regulation of its con-

cerns is committed to a diet, which holds its sessions at Frankfort on the Maine. In the decision of all ordinary questions the number of votes is 17, the eleven larger states being each entitled to one vote, while the smaller states are divided into six classes, and each class has one vote. But when fundamental laws are to be enacted, and in some other questions of prime importance, the diet resolves itself into the general assembly, in which Austria has 4 votes, Prussia 4, Saxony 4, Bavaria 4, Hanover 4, Wirtemberg 4, Baden 3, Hesse-Cassel 3, Hesse-Darmstadt 3, Holstein and Lauenburg 3, Luxemburg 3, Brunswick 2, Mecklenburg-Schwerin 2, Nassau 2, and each of the other states and free cities 1, making 70 in all. In ordinary cases, a simple majority of votes decides the question, but in the general assembly two-thirds of the votes are necessary. Austria always presides. In the regulation of its local concerns each state is independent.

Army and Revenue.] The army of the confederation in time of peace is 120,000 men, of whom 96,000 are infantry, 18,000 cavalry, and 6000 artillery. In war the number is greatly increased, the contingent of each state being then one for every 100 of its population, making a total of 300,000 men, with a reserve of 1 in 200, making the whole reserve force 150,000 men. The revenue of the confederation is derived from the individual states, each paying a fixed sum in proportion to its population.

Manufactures.] The most important manufacture is linen, which is made in large quantities in Silesia, Saxony and the western division of Prussia, and has long been famous for its durability. Next to linen are woollen and cotton goods. Porcelain, iron, steel, gold and silver wares and glass are also manufactured in considerable quantities.

Commerce.] Germany is in many respects well situated for trade, lying in the centre of Europe, bordering upon three seas, and intersected by numerous navigable rivers. On the other hand the want of foreign colonies, the small number of good ports, and especially the division of the country among so many independent princes, each of whom heretofore exacted a toll on the merchandize which passed through his territory, have prevented the attainment of a very high rank among commercial states. The principal exports are linen, grain, wood, cattle, salt, mineral productions, woollen and cotton goods and other manufactured articles. The principal imports are East and West India produce, silk, cotton, tobacco, &c.

The particular states remain to be described. An account has already been given of Holstein, Lauenburg and Luxemburg under Denmark and the the Netherlands. Prussia and Austria, as they embrace extensive territories not included in Germany, will be reserved for a separate description. Of the remaining states Bavaria is the first in extent and population.

1. BAVARIA.

Situation and Extent.] Bavaria is bounded N. by Hesse-Darmstadt, Hesse-Cassel, Saxe-Meiningen, Saxe-Coburg, Reuss, and the kingdom of Saxony; E. and S. by the Austrian dominions; W. by Wirtemberg, Baden and Hesse-Darmstadt. It lies between $47^{\circ} 10'$ and $50^{\circ} 40'$ N. lat. and between 9° and $13^{\circ} 50'$ E. lon. Besides the country included within these boundaries there is a detached territory on the west side of the Rhine, lying between France, Prussia, Hesse-Darmstadt and Baden. The area is estimated at 31,966 square miles, of which about 1,800 belong to the territory on the Rhine.

Divisions.] Bavaria is divided into 8 circles, which derive their names, like the departments of France, from the rivers on which they are situated.

Circles.	Population acc. to Haasel.	Chief Towns.
The Iser,	520,000	Munich.
The Lower Danube,	355,000	Passau.
The Regen,	387,000	Regensburg.
The Upper Danube,	438,000	Augsburg.
The Rezat,	446,000	Anspach.
The Upper Maine,	498,000	Bayreuth.
The Lower Maine,	440,000	Wurtzburg.
The Rhine,	257,000	Speyer.

Face of the Country, &c.] The surface along the southern, eastern, northern and northwestern frontier is mountainous; in the interior it is undulating and in some parts level. The principal rivers are, 1. The Danube, which flows through the heart of the kingdom from west to east, and receives in its progress the Lech, the Par, the Iser, the Vils and the Inn from the south, and the Altmuhl and Regen from the north; 2. The Maine, which rises in the N. E. part of the kingdom, and flowing west receives the Regnitz from the south. The soil of Bavaria is various, some parts being very fertile and others quite barren. The principal productions are corn, of which large quantities are exported to all parts of Germany, and the vine, which is cultivated to a great extent in the circle of the Rhine, and along the banks of the Maine. Salt is found in abundance near Salzburg in the S. E. and iron and quicksilver in the circle of the Rhine.

Chief Towns.] Munich, the capital of Bavaria, is in the southern part of the kingdom, on the west bank of the Iser. It is the place of meeting of the Bavarian parliament, the seat of the higher courts of justice, of the government offices, and of several literary and scientific institutions, and it is to these establishments that the inhabitants chiefly owe their support, the trade and manufactures of the town being very limited. The Iser is

not navigable and the roads both to the east and west are very indifferent. The population is 47,000.

Augsburg, celebrated for the confession of faith presented here by Luther and Melancthon to the emperor Charles V. in 1530, is on the Lech, 40 miles N. W. of Munich. It has considerable commerce and manufactures, and 30,000 inhabitants.

Nurnberg or *Nuremberg*, on a branch of the Regnitz, is celebrated for its manufactures, which consist of musical and mathematical instruments, copper plates, pins, needles, spectacles, and toys of all kinds. Printing and bookselling are also carried on to a considerable extent. Population 27,000.

Passau is a strongly fortified town at the confluence of the Inn and the Danube, which divide it into three parts, one on the peninsula, one on the N. side of the Danube and one on the E. side of the Inn. The three are connected by long wooden bridges and contain 10,000 inhabitants.

Ratisbon or *Regensburg*, on the S. bank of the Danube opposite the mouth of the Regen, was the place of meeting for the diet of the German empire from 1662 to 1805. It formerly had the exclusive navigation of the Danube, downwards to Vienna, and upwards to Ulm, and still possesses a considerable share of that traffic. Population 22,000.

Landau is a strong town in the circle of the Rhine, on the Queich, garrisoned by the troops of the German confederation. Pop. 4,000. *Gernersheim*, also in the circle of the Rhine, at the conflux of the Queich with the Rhine, is at present a strong town, and its fortifications are about to be greatly increased, the diet of Frankfort having fixed on it as one of the bulwarks of Germany, and appropriated no less than £600,000 sterling for additional works. Population 1,500.

Wurzburg is a well fortified town on both sides of the Maine in the midst of extensive vineyards. Population 16,000. *Bamberg*, situated on the Regnitz, which enters the Maine a little below the town, contains 20,000 inhabitants. *Anspach*, on the Rezat, 30 miles S. W. of Nuremberg, has 14,000 inhabitants. *Ingolstadt* is a strong town on the Danube 43 miles N. of Munich, with 5,000 inhabitants.

Population, Religion, &c.] The population, according to the official returns in 1818, was 3,560,000; of this number about four-fifths are Roman Catholics, and the remainder Protestants, with the exception of 12,000 Jews. The Bavarians were formerly reckoned among the most intolerant Catholics in Europe, but since the commencement of the present century more liberal sentiments have prevailed, and the Protestants are now not only unrestrained in their worship but are eligible to civil and military offices. Education has also of late been widely diffused through the kingdom, and though formerly scarcely one man in ten could either read or write, at present the majority of the youth are instructed in all the common branches. There are universities at Wurzburg and Aschaffenburg on the Main, at Landshut on the Iser, and at Erlangen on the Rednitz.

Government and Army.] The government is a monarchy limited by a diet, which consists of two chambers: 1. The chamber of counsellors, to which belong the princes of the royal family, the mediatised princes and counts, the two archbishops, the president of the Protestant General consistory, the officers of the crown and any persons appointed by the king. 2. The chamber of deputies, which includes deputies from each of the universities, from the clergy both Protestant and Catholic, from the cities and market towns, and from the landholders. The army consists of between 40,000 and 50,000 men.

Manufactures and Commerce.] There are very few large manufacturing establishments in Bavaria. The principal exports consist of natural productions, particularly corn, wine, wood and salt.

2. WIRTEMBERG.

Situation and Extent.] Wirtemberg is bounded on the east by Bavaria, and on the southwest, west and north by Baden. For a little distance on the south it is washed by the Boden See or lake of Constance. It lies between $47^{\circ} 36'$ and $49^{\circ} 45'$ N. lat. and between $8^{\circ} 23'$ and $10^{\circ} 26'$ E. lon. The area is estimated at 8,118 square miles.

Divisions.] The kingdom has been recently divided into four circles.

Circles.	Population.	Chief towns.
1. The Neckar,	355,000	Ludwigsburg.
2. The Schwarzwald,	361,000	Reutlingen.
3. The Jaxt,	319,000	Elwangen.
4. The Danube,	361,000	Ulm.

The cities of Stuttgart and Cannstadt are not included in either of the circles.

Face of the Country.] The surface of the country is more mountainous than level. Two considerable chains of mountains, the Schwarzwald and a branch of the Alps, run through the kingdom, in many ridges, and give birth to a great number of small rivers and brooks. The principal rivers are, 1. The *Danube*, which runs from S. W. to N. E. completely across the kingdom, and receives the Iller near the eastern boundary. 2. The *Neckar*, which rises in the Schwarzwald and running north receives the Kocher and the Jaxt, besides many smaller streams. The soil is fertile, except in the most elevated parts of the mountains. The principal productions are, corn in sufficient quantities for the supply of the kingdom; wine, particularly in the valley of the Neckar; wood, in abundance; fruit of various kinds; horned cattle and sheep.

Chief Towns.] Stuttgart, the capital of the kingdom, is situated in a delightful country on the Nasenbach, about two miles from its entrance into the Neckar. It contains 23,000 inhabitants. Ulm, situated at the confluence of the Iller with the Danube, contains 15,000 inhabitants. The diet of Frankfort have determined to

connected with the above. The number of students varies from 1,000 to 1,200, and is greater than at any other university in Germany. The library consists of about 200,000 volumes, and is perhaps more valuable than any other in Europe, an unusual proportion of the collection being modern and useful books. The regular funds for the purchase of books are about £800 sterling a year. Gottingen is the resort of students from various parts of Germany, from England, and of late even from America.

Government. Revenue, &c.] The government is a monarchy limited by a diet consisting of two chambers, one composed of the nobility and the higher order of the clergy, and the other of deputies from the cities, the university, and the landholders. No tax can be levied or new law made, without the consent of the states. The crown is hereditary, and the succession is limited to the male line. The king of Great Britain is also king of Hanover, but although the two countries have been governed for a century by the same sovereign, they are still politically distinct. There have in fact been several instances of the same prince making peace with an enemy in the capacity of elector of Hanover, while the king of Great Britain continued at war; and in the convention of 26th of August 1815, for keeping up an army on the French frontier, the king of Great Britain bound himself, in due diplomatic form, to pay a subsidy to the king of Hanover. The king is represented in Hanover by a viceroy, who at present is the duke of Cambridge. The revenue amounts to £900,000; the public debt is small, not exceeding £1,500,000. The army contains about 20,000 men.

SAXONY.

Situation and Extent.] Saxony is bounded N. and N. E. by Prussia; S. E. and S. by Austria, W. by Reuss and Prussia. It lies between 50° 10' and 51° 30' N. lat. and between 12° and 15° E. lon. The area is estimated by Hassel at 7,436 square miles. Previous to 1814 the kingdom contained nearly twice as many square miles and twice as many inhabitants as it does at present, (exclusive of a part of Poland which was also subject to this crown) but at the Congress of Vienna the king was punished for his adherence to Bonaparte, by the loss of all his Polish territories, and one half of his hereditary dominions which are now incorporated with the Prussian states, and Saxony is reduced to the smallest kingdom in Europe.

Divisions.] Saxony is divided into 5 circles.

Circles.	Square miles.	Population.	Chief towns.
Meissen,	1584	268,000	Dresden.
Leipsic,	1386	215,000	Leipsic.
Erzgebirge,	2574	45,000	Freiberg.
Vogtland,	704	95,000	Plauen.
Upper Lusatia,	1188	170,000	Bautzen.

Face of the Country, &c.] The Erzgebirge mountains run along the southern frontier separating the kingdom from Bohemia. The descent from these mountains, though steep on the side of Bohemia, is gentle and undulating on that of Saxony, and it is only in the northern half of the kingdom that it subsides into plains. The principal river is the Elbe, which passes through the kingdom from S. E. to N. W. The soil in the southern and mountainous parts of Saxony is well cultivated only in the vallies, but in the level districts of the north, particularly in the circles of Meissen and Leipsic, tillage is general. The products are wheat, barley, oats and other grain, also some tobacco and hops. Of the domestic animals, the chief care has been bestowed on the sheep, Merino wools having been imported about 50 years ago, and the Saxon wool rendered by continued good management, the best in Germany. Few countries equal Saxony in mineral riches, the Erzgebirge mountains abounding in mines of iron, copper, lead, silver, cobalt, zinc and coal, all of which are extensively and skilfully wrought. Porcelain clay also is found in the neighborhood of Meissen.

Chief Towns.] *Dresden*, the capital of the kingdom, and one of the best built towns in Europe, is beautifully situated on both sides of the Elbe, at the influx of the Weisseritz. Many of the public buildings are in a fine style of architecture, and there is a magnificent stone bridge across the Elbe, which was accounted the finest in Germany until injured by the French in 1813. The city has long been distinguished for the cultivation of the fine arts; the patronage of the sovereigns, and the collection of the works of great masters, affording inducements for artists to reside here. It has manufactures of mirrors, tapestry, lace, jewellery, porcelain, earthenware, and plaited straw. Dresden has suffered repeatedly and severely from war, and the population has in consequence declined. In 1755 it was 63,000, in 1817 only 45,000.

Leipsic or *Leipzig*, on the Pleisse, a branch of the Saale, is celebrated for its university, its fairs, and the battles fought in its vicinity. It is the chief commercial city in the interior of Germany, its central position and other circumstances having giving it a decided advantage over other places. A great part of its business is transacted at the three great fairs, which take place at the new year, Easter and Michaelmas. These fairs are attended by an immense concourse of people, not only from every part of Germany, but from almost every country in Europe. The total value of the business transacted here in a year is computed at 18,000,000 of dollars, exclusive of the book trade, which forms a remarkable and a peculiar feature in the commerce of Leipsic. Here the booksellers of every large town in Germany assemble at the Easter fair to exchange their respective publications. The number of booksellers settled at Leipsic is between 50 and 60, and the number from other parts who attend the fair, varies from 200 to 300. The new publications exhibited for sale, are computed at an average of 5,000 distinct works. Leipsic and its neighborhood

have been repeatedly the scene of military conflicts. The most celebrated was that between the French and the allies on the 16th October 1813. The opposing armies were among the greatest of which we read in authenticated history: the allies were 240,000 strong, the French were 160,000. The latter were defeated with the loss of 40,000 or 50,000 men. The population of Leipsic is 33,000.

Freyberg, 20 miles S. W. of Dresden, is a celebrated mining town, and the residence of the officers who have the superintendence of all the mines throughout the kingdom. A mining academy was established here in 1765 which has been rendered famous by the names of Werner, Charpentier, Lampe and others. The whole of the neighboring district is full of mines; those in a state of activity amount to 250 and employ about 5,000 workmen. The population of the town is 9,000. *Meissen*, on the Elbe, 15 miles N. W. of Dresden, is celebrated for its porcelain manufacture. It has 6,000 inhabitants. *Plauen*, in the S. W. part of the kingdom, has extensive muslin manufactures, which extend to the towns in its vicinity. Population 6,000. *Bautzen*, on the Spree, 30 miles E. N. E. of Dresden, is celebrated for the bloody battle fought in its vicinity in June 1813, between the French and allies. It has 11,000 inhabitants.

Population, Religion and Education.] The population is 1,200,000, and the country is more thickly settled than any other state in Germany except Wirtemberg and Baden. The great majority of the inhabitants are of the Lutheran religion, but the reigning family are Catholics. The institutions for education are numerous and well conducted, it being a common remark that in no country except Scotland and some parts of Switzerland are the lower classes so generally taught to read and write. The Saxons have also cultivated literature and the elegant arts with more success than any other people in Germany, and in no country of equal extent is the number of printing and bookselling establishments so great. The university at Leipsic is one of the most frequented of the German universities, although it perhaps yields the palm to Gottingen in the reputation of its professors. The number of students varies from 900 to 1,200. The number of regular professors is 27, exclusive of extra professors, private lecturers, and teachers of the living languages and fashionable exercises.

Government, &c.] Saxony is a kingdom, and the power of the sovereign is limited by the states, without whose consent no law can be made, and no tax imposed. The revenue amounts to £850,000, and the public debt is stated at £3,700,000. The army on the present peace establishment amounts to 12,000 men.

Manufactures and Commerce.] Saxony is more distinguished for its manufactures than any other part of Europe, except England, the Netherlands and the north of France. The principal article is linen, which is manufactured in almost every village in the kingdom, but particularly in Upper Lusatia. Woollens are

likewise manufactured in a number of towns. Cotton spinning and weaving acquired a rapid extension towards the close of the last century, and have of late years been benefitted by the introduction of improved machinery. The manufactures connected with the mines are of considerable extent, particularly at Freyberg. The principal exports from Saxony besides manufactured articles are wool and minerals.

SMALLER GERMAN STATES.

I. THE GRAND DUTCHY OF BADEN. This country lies in the S. W. corner of Germany, along the Rhine, which separates it on the S. from Switzerland, and on the W. from France and the Bavarian circle of the Rhine; on the N. it is bounded by Hesse-Darmstadt and Bavaria, and on the E. by the kingdom of Wirtemberg. The surface is in some parts mountainous, but is made up principally of fertile and well-cultivated vallies which supply the inhabitants with all the necessities of life, and furnish corn, wood and wine for exportation.

The population is 1,000,000, of whom 600,000 are Catholics, 300,000 Lutherans, and the remainder principally Calvinists. The government is monarchical; the title of the sovereign is Grand Duke, and since 1818 his power has been limited by the states, which are divided into two chambers.

Chief Towns.] *Carlsruhe*, the residence of the grand duke and his court, is a beautiful town, about 3 miles from the Rhine, in lat. 49° N. It is laid out on a regular plan with streets diverging from a centre in the form of radii. The houses are almost all of stone, and the population is 15,000. *Manheim*, situated at the confluence of the Neckar with the Rhine, is also regularly laid out, and is said to be the most beautiful town in Germany. It contains 18,000 inhabitants. *Heidelberg*, on the Neckar, 10 miles from its mouth, is celebrated for its university, which has 26 professors and between 500 and 600 students. Of late it has been liberally patronised by the government, and its reputation as a place of education is increasing. The population of the town is 10,000. There is another university at *Freyburg* with 300 students. *Constance* is situated on the lake of Constance, at the point where the Rhine flows from the upper into the lower lake. It has 4,500 inhabitants.

II. HESSE-DARMSTADT OF the GRAND DUTCHY OF HESSE. This state consists of two distinct territories, detached from each other, one lying on the north and the other on the south side of the Maine. The northern division is bounded on the north, east and south by Hesse-Cassel, on the S. W. by the territory of the free city of Frankfort, and on the west by Nassau and part of Prussia. The southern division lies along the Maine and on both sides of the Rhine, and is bounded N. by Nassau, the territory of Frankfort, and Hesse-Cassel; E. by Bavaria; S. by Baden; S. W. by

the Bavarian circle of the Rhine, and N. W. by a part of Prussia. The two parts are nearly equal in extent and contain together 4,246 square miles. The surface is more mountainous than level, yet in many parts it is very fertile, particularly in the part on the west side of the Rhine. The population is 619,500, of whom the greatest proportion are Lutherans; there are, however, a number of Catholics and Calvinists; also a few Jews. The government is a monarchy limited by the states, but they have not for a long time been assembled, and although the grand duke has recently promised to restore them, no step for that purpose has as yet (1820) been taken.

Chief Towns.] *Darmstadt*, the capital, is a neat town, 14 miles S. of Frankfort-on-the-Maine, and contains 18,000 inhabitants. *Mentz*, the largest town, is on the west bank of the Rhine, immediately below the influx of the Maine. It is built in the form of a semicircle, of which the Rhine forms the diameter, and is the strongest fortress in Germany. The greatest defect of the works is their extent, which is such as to require a garrison of 30,000 men. The population of the town is 25,000. *Giessen*, the largest town in the northern division of the grand duchy, is 36 miles N. E. of Mentz, and has a university and 8,000 inhabitants. *Offenbach*, the largest manufacturing town, is on the south bank of the Maine, 4 miles above Frankfort, and has 9,000 inhabitants. *Worms*, celebrated as the place where the reformation commenced in 1525, is on the west side of the Rhine, 25 miles S. of Mentz.

III. HESSE-CASSEL. This state is bounded on the N. E. by Hanover and Prussia; E. by Weimar and Bavaria; S. by Bavaria and Hesse-Darmstadt; W. by Hesse-Darmstadt; and N. W. by a part of Prussia and Waldeck. Besides the country included in these boundaries there are two small detached territories belonging to Hesse-Cassel. 1. The lordship of Schmalcalden, lying to the east, in the Thuringerwald, surrounded by the Saxe duchies. 2. The lordship of Schauenburg, lying to the north, on the Weser, surrounded by Lippe and the kingdom of Hanover. The whole area is 4,422 square miles, of which the lordship of Schmalcalden contains 121, and the lordship of Schauenburg 200. The surface is generally mountainous, interspersed with some fertile vallies. The principal productions are grain, potatoes, flax and hemp; and near the southern boundary the vine is extensively cultivated. The mountains abound with wood, and in the lordship of Schmalcalden with many valuable metals and minerals. The population is 540,000, a majority of whom are Calvinists. The government is a monarchy limited by the states, which consist of the prelates, the nobles and the representatives of the towns and peasants. The title of the sovereign is "Elector of Hesse, and grand duke of Fulda."

Chief Towns] *Cassel*, the capital, is in the northern part of the electorate, on the Fulda. It contains 18,000 inhabitants. *Fulda*, the capital of the territory from which the sovereign takes the title of grand duke, is on the river Fulda, and contains 7,500

inhabitants. *Hanau*, the largest manufacturing town and the chief commercial place of Hesse-Cassel, is situated on the Kinzig not far from its junction with the Maine, 13 miles E. of Frankfort-on-the-Maine, in the midst of one of the most fertile districts in Germany. It contains 12,000 inhabitants. *Schmalcalden*, the capital of the lordship of the same name, is 56 miles S.E. of Cassel, in lat. $50^{\circ} 47'$ N. lon. $10^{\circ} 26'$ E. *Marburg*, on the Lahn, 45 miles S. W. of Cassel, has a university and 6,500 inhabitants.

IV. *HESSE-HOMBURG*. This is a small principality, containing only 132 square miles and 20,000 inhabitants, and belonging, with the title of landgrave, to a younger branch of the family of Hesse-Darmstadt. Small as it is, however, it consists of two detached territories, viz. the county of Homburg, lying on the east side of the Rhine, 8 or 9 miles N. of Frankfort-on-the-Maine, and the lordship of Meisenheim situated west of the Rhine, between the Bavarian circle of the Rhine and the Prussian territories.

V. *MECKLENBURG*. This territory is bounded N. by the Baltic; E. and S. by the Prussian states; S. W. by the kingdom of Hanover, from which it is separated by the Elbe; and W. by the dutchy of Lauenburg and the territory of the free city of Lübeck. It is divided into two grand dutchies, which are named, after their principal towns, Mecklenburg-Schwerin and Mecklenburg-Strelitz. The former, which is much the largest, contains 4,928 square miles and 358,000 inhabitants; the latter, 902 square miles and 71,769 inhabitants. The principal production is corn of which considerable quantities are exported. The inhabitants are almost entirely Lutherans. The principal towns in Mecklenburg-Schwerin are, *Schwerin*, which lies on the west side of a lake of the same name, 60 miles E. of Hamburg, and contains 8,500 inhabitants; and *Rostock*, on the Warnow, 8 miles from its mouth, a place of flourishing trade, with a university and 13,000 inhabitants. The chief town in Mecklenburg-Strelitz is *Strelitz*, which lies in the S. E. part of the territory, near the Prussian boundary.

VI. *The Dutchy of NASSAU*. This territory lies in the west of Germany, and is bounded N. by a part of Prussia; E. by Hesse-Cassel, Hesse-Homburg, and Hesse-Darmstadt; S. by Hesse-Darmstadt, and W. by a part of Prussia, from which it is separated by the river Rhine. The area is estimated at 2,225 square miles. The face of the country is mountainous and hilly. The rivers are the Rhine, the Maine and the Lahn. The culture of the vine and the rearing of cattle form the chief employments of the inhabitants. The population is 302,767, of whom about one half are Protestants and one half Catholics. The power of the sovereign is limited by the states.

VII. *The Grand Dutchy of OLDENBURG* lies in the N. W. part of Germany, and is bounded N. by the German ocean; E. by Hanover and the territory of the free city of Bremen; S. and W. by Hanover. The Weser forms part of the eastern boundary. There are besides, two small detached territories, viz. 1. The

principality of Eutin, lying a little north of Lubec and surrounded on all sides by the dutchy of Holstein, and 2. the lordship of Birkenfeld, lying west of the Rhine, along the Nahe, near the boundary between the Bavarian circle of the Rhine and the Prussian territory. The area of the whole is estimated at 2,840 square miles, of which the principality of Eutin contains 200 and the lordship of Birkenfeld 170. The surface of Oldenburg proper is level, and near the coast so low that dikes are necessary to prevent inundation from the sea. The principal productions are horses, cattle, flax, hemp and hops. The population is 217,769. The prevailing religion is the Lutheran. The power of the grand duke is as yet (1820) unlimited, he having delayed to convoke a representative assembly, though bound to do so. Oldenburg, the capital, is on the river Hunte, 76 miles W. S. W. of Hamburg, and contains 5,000 inhabitants.

VIII. The Dutchy of BRUNSWICK consists chiefly of two detached territories lying between the two divisions of the Prussian dominions, and separated from each other by a part of the kingdom of Hanover, which also forms the boundary of both divisions on the north, and of the western division on the south. The area of the whole is estimated at 1,562 square miles. The northern division is level and has a fertile soil; the southern division lies partly on the Hartz, and is rich only in minerals. The population is 209,600, principally Lutherans. The power of the sovereign is limited by the states.

Chief Towns.] *Brunswick*, the capital, is situated on the Ocker, a branch of the Aller. It has 30,000 inhabitants and a college with 20 professors. The manufactures are numerous, and the trade extensive, particularly at the great Brunswick fairs which are held twice in the year, and next to those of Leipsic and Frankfort are the most important in Germany. *Wolfenbittel*, on the Ocker, 7 miles S. of Brunswick, formerly the residence of the dukes of Brunswick, has 7,000 inhabitants.

IX. The Grand Dutchy of SAXE-WEIMAR consists of several detached territories in the centre of Germany, the largest of which lies on the Saale, and is surrounded by Saxe-Gotha, the Prussian territories, and Schwartzburg-Rudolstadt. The whole contains 1,450 square miles and 201,000 inhabitants, who are principally Lutherans. The title of the sovereign is grand duke, and his power is limited by the states, without whose consent no law can be made and no taxes levied.

Chief Towns.] *Weimar*, the capital, is on the Ilm, a branch of the Saale, 46 miles S. W. of Leipsic. It is celebrated as a seat of literature, owing to the liberal patronage of the grand ducal family. The palace of the grand duke contains a library of 100,000 volumes, a cabinet of medals, a museum, and a gallery of paintings. *Jena*, on the Saale, is celebrated for its university, which has more than 30 professors and 600 students, and also for the great battle of the 14th October 1806 between the French and Prussians, in which the former were victorious. The population

is 8,000. *Eisenach*, 40 miles W. of Weimar, in one of the detached territories of the grand duchy, contains 8,000 inhabitants.

X. The Dutchy of **SAXE-GOTHA** consists of two principalities nearly equal in extent. 1. The principality of *Gotha*, which is surrounded by the Prussian states, *Saxe-Weimar*, *Schwartzburg-Rudolstadt*, *Saxe-Meinungen* and *Hesse-Cassel*; and 2. The principality of *Altenburg*, which is made up of several detached territories, the largest of which lies on the *Pleiss* and is surrounded by the kingdom of *Saxony*, the Prussian states, *Saxe-Weimar* and *Reuss*. The whole dutchy contains 1188 square miles and 185,682 inhabitants, a majority of whom are Lutherans. The power of the duke is limited by a diet. *Gotha*, the capital, is 31 miles W. of Weimar. The castle, in which the duke resides, contains a library of 60,000 volumes. Population 11,600. *Altenburg*, the capital of the principality of the same name, is on the *Pleisse*, 20 miles S. of *Leipsic*, and contains 10,000 inhabitants.

XI. The Dutchy of **SAXE-COBURG** consists principally of three territories detached from each other. 1. The principality of *Coburg* which is surrounded by *Bavaria*, *Saxe-Meinungen*, *Rudolstadt* and *Saxe-Hildburghausen*. 2. The principality of *Saalfeld*, which lies between *Rudolstadt* and *Reuss*. 3. The newly-acquired lordship of *Baumholder*, on the west side of the *Rhine*, between the *Bavarian circle of the Rhine*, the Prussian territories, and the small districts belonging to *Oldenburg* and *Hesse-Homburg*. These three divisions are nearly equal in extent and population, and contain in all 594 square miles and 80,012 inhabitants. The prevailing religion is the Lutheran in the two first divisions, and Roman Catholic in the lordship of *Baumholder*. *Coburg*, the capital, is on the *Itz*, a branch of the *Maine*, and contains 7000 inhabitants. *Saalfeld*, on the *Saale*, 20 miles N. N. E. of *Coburg*, contains 3,100 inhabitants.

XII. The Dutchy of **SAXE-MEINUNGEN** consists of two separate territories, the largest of which lies along the *Werra* and the *Bavarian boundary*, and the other in the *Thuringerwald* between *Saxe-Coburg* and *Rudolstadt*. Together they contain 400 square miles and 54,400 inhabitants. *Meinungen*, the capital, is on the *Werra*, and contains 4,200 inhabitants.

XIII. The Dutchy of **SAXE-HILDBURGHAUSEN** lies on the south side of the *Thuringerwald*, around the sources of the *Werra*. It contains 240 square miles and 27,706 inhabitants. *Hildburghausen*, the capital, is on the *Werra*, 20 miles N. W. of *Coburg* and contains 2,500 inhabitants.

XIV. The **SCHWARTZBURG PRINCIPALITIES**. These are, 1. *Schwartzburg-Rudolstadt*, which lies on the sides of the *Thuringerwald*, and is surrounded by the Prussian territories and the dominions of the house of *Saxe*. It contains 484 square miles and 53,937 inhabitants. *Rudolstadt*, the chief town, is on the *Saale*, and contains 4,100 inhabitants. 2. *Schwartzburg Sondershausen* lies further north, and is entirely surrounded by the Prussian territories. It contains 506 square miles, and 45,117 inhabitants.

XV. **LIPPE-DETMOLD.** This principality lies south of the Weser, on the borders of the kingdom of Hanover and the western division of the Prussian states. It contains 440 square miles, and 69,062 inhabitants. *Detmold*, the capital, contains 2,400 inhabitants.

XVI. **SCHAUENBURG-LIPPE**, a principality composed of parts of the counties of Schauenburg and Lippe, lies principally on the north side of the Weser, and is almost surrounded by the kingdom of Hanover. It contains 220 square miles and 24,000 inhabitants.

XVII. The Principality of **ANHALT** is wholly surrounded by the Prussian dominions. The Elbe passes through it, and here receives the Mulda and the Saale. The surface is almost entirely level and the soil fertile. Anhalt is at present divided into three parts, belonging to three different branches of the reigning family, and each division is called a dutchy, and takes its name from its principal town. 1. *Anhalt-Dessau* contains 374 square miles and 52,947 inhabitants. *Dessau*, the chief town, is on the Mulda near its junction with the Elbe, and contains 9,200 inhabitants. 2. *Anhalt-Bernburg* contains 352 square miles and 37,046 inhabitants. *Bernburg*, the principal town, is on the Saale and contains 4,800 inhabitants. 3. *Anhalt-Cöthen* contains 330 square miles and 32,454 inhabitants. *Cöthen*, the chief town, contains 5,200 inhabitants.

XVIII. The Principality of **REUSS.** This territory lies on the Saale and the Elster, and is surrounded by Saxony, Bavaria and the territories of the Saxe dutchies. It contains 629 square miles and 74,460 inhabitants. The princes of Reuss are of a very old family, repeatedly divided and subdivided into lesser branches. At present it consists of two principal lines, the elder and the younger. 1. The elder or *Reuss-Greiz* line possesses 154 square miles and 22,255 inhabitants. *Greitz*, the chief town, has 5,000 inhabitants. 2. The younger line is subdivided into, a. The *Schleitz* line. b. The *Lobenstein-Lobenstein* line. c. The *Lobenstein-Eberdorf* line. d. The *Gera* line, which is now extinct. All these take their names from the principal towns. The four branches of the younger line possess 475 square miles and 52,205 inhabitants, and are together entitled to only one vote in the general assembly at the diet of Frankfurt.

XIX. The Principality of **WALDECK** consists of the counties of Waldeck and Pyrmont; the former of which lies between Hesse-Cassel and the Prussian territories, and the latter, near the Weser, between Lippe-Detmold and the kingdom of Hanover. Waldeck contains 477 square miles and 51,877 inhabitants.

XX. **HOHENZOLLERN** is a small principality in the S. W. of Germany, on both sides of the Danube, and surrounded by Wirtemberg and Baden. It is divided between two branches of the reigning family into, 1. *Hohenzollern-Sigmaringen*, which contains 440 square miles and 35,360 inhabitants. 2. *Hohenzollern-Hechingen*, which contains 110 square miles and 14,500 inhabitants.

XXI. The Principality of LICHTENSTEIN lies on the Rhine before it enters the lake of Constance, and is bounded on the E. and S. by the Austrian territories. It contains 55 square miles and 5,546 inhabitants.

FREE CITIES.

1 *Hamburg*, the greatest commercial city in Germany, stands on the north bank of the Elbe, about 80 miles from its mouth. The Elbe, expanded by the tide, is here from 3 to 6 miles broad, and receives from the north the Alster, which flows into it, after forming a basin and several islands within the city. Hamburg covers a large extent of ground, but nearly a third of the space included by the walls is occupied by canals, piers, and the basin formed by the Alster. The streets of the town are narrow, crowded and irregular, and the houses awkward and old-fashioned. Several manufactures are prosecuted here to a great extent, particularly the refining of sugar, and the printing of cotton, linen and handkerchiefs. The foreign trade extends to almost every part of the world. The internal trade, by means of the Elbe, extends to Saxony, and even to Bohemia. There is also a canal from the Alster to the Trave, which opens a communication with the Baltic.

The established religion in Hamburg is Lutheran, but complete toleration prevails. The government is an aristocracy, checked by the authority of the citizens at large. The aristocratic part consists of the senate to the number of 28, who receive an annual salary, and constitute the executive power. They have no hereditary right, but they have the privilege of electing their own members. The citizens act by delegation. The senate alone can propose a law, its adoption or rejection rests with the representatives of the citizens. The territory of Hamburg contains 140 square miles. It consists of the city and a small district lying around it, of the town and bailiwick of Cuxhaven, at the mouth of the Elbe, and several villages scattered in the duchy of Holstein. The population is 129,800, of whom 115,000 are within the city. Hamburg is connected with Frankfort, Lubeck and Bremen, in some commercial regulations; and they still retain the old name of Hanse-towns.

2. *Bremen* is 54 miles S. W. of Hamburg, on the Weser, by which it is divided into two parts, called the old and new towns, both of which are fortified. The harbor is at a place called Elfsleth, 6 miles nearer the sea. The trade of Bremen is extensive, and is in part founded on its manufactures of refined sugar, cotton and woollen cloths, &c. but chiefly on the exportation of the produce of the countries lying on the Weser, and the importation of such foreign goods as find a market in these parts of Germany. The territory of Bremen contains 77 square miles, and 48,500 inhabitants, of whom 37,700 are within the city.

3. *Frankfort-on-the-Maine*, now the permanent seat of the Germanic diet, is situated on both sides of the Maine, about 20 miles above its influx into the Rhine. Frankfort was formerly fortified, but most of its outworks are now converted into gardens and promenades. The commerce of the town is very extensive, and is greatly promoted by the navigation of the Rhine and Maine, as well as by the two great fairs held here annually in spring and autumn, at which merchandise of all kinds, and from all parts of Europe are offered for sale. The territory of Frankfort contains 110 square miles, and 47,850 inhabitants, of whom 41,000 are within the city. The prevailing religion is the Lutheran. There are, however, 8,000 or 9,000 Jews, who formerly lived in a separate quarter of the city, blocked up at one end, and regularly shut at night, but they are now allowed to live in other parts of the town, though not yet entirely exempted from vexatious treatment.

4. *Lubeck* is 36 miles N. E. of Hamburg, on the Trave, a navigable river which joins the Baltic about 8 miles below. Its harbor is properly at Travemunde, at the mouth of the river, where ships drawing more than 10 feet water discharge part of their cargo. The trade of Lubeck consists chiefly in the export of corn from the adjoining country, and the import of wine and British manufactures; the whole to no great amount, Hamburg having great advantages, from its easier access to the ocean, and more extensive communication with the interior. The territory of Lubeck contains 120 square miles, and 40,650 inhabitants, of whom 25,500 are in the city. The prevailing religion is the Lutheran.

PRUSSIA.

Situation and Extent.] The Prussian states consist principally of two territories, entirely detached from each other. The eastern and much the largest division is bounded N. by the Baltic; E. by Russia and the new kingdom of Poland; S. by Austria, the kingdom of Saxony, and the Saxe dutchies; and W. by Hesse-Cassel, Hanover, Brunswick, and Mecklenburg. The western division is bounded N. by the Netherlands and Hanover; E. by Waldeck, Hesse-Cassel, Nassau, Hesse-Darmstadt, and the Bavarian circle of the Rhine; S. by France, and W. by the Netherlands. There is besides, the canton of Neufchatel in Switzerland, which is subject to Prussia. The eastern division contains 87,169 square miles, the western division 18,271, and the canton of Neufchatel 330; in all, 105,770.

Divisions.] Prussia was divided, by a decree of 20th April 1815, into 10 provinces, each of which is again subdivided into two or

more governments, which derive their names from their chief towns. The number of governments is 28, and each is subdivided into 8, 10, 12 or more districts.

Provinces.	Sq. miles.	Population.	Pop. on a sq. m.	Chief towns.
1. East Prussia,	15,884	855,244	54	Konigsberg.
2. West Prussia,	10,373	560,128	54	Dantzic.
3. Brandenburg,	15,471	1,191,121	77	Berlin.
4. Pomerania,	12,815	665,836	52	Stettin.
5. Silesia,	15,400	2,017,057	131	Breslau,
6. Posen,	7,040	544,641	77	Posen.
7. Saxony,	10,186	1,148,041	112	Magdeburg.
8. Westphalia,	7,832	991,899	127	Munster,
9. Cleves & Berg,	3,773	908,185	240	Cologne,
10. Lower Rhine,	6,666	971,597	146	Aix-la-Chapelle.
		<hr/>	<hr/>	
		105,440	9,853,749	93
Add Neufchatel,	330	50,800	154	
		<hr/>	<hr/>	
Total,	105,770	9,904,549	94	

Face of the Country.] The eastern division forms an extensive plain, skirted on its southern border by the high Sudetic mountains in Silesia, and in the province of Saxony by the Thuringerwald and the Hartz. The western division is traversed by ranges of rough hills and mountains, particularly in the part on the east side of the Rhine. Along the coast of the Baltic, in Pomerania, the land is so low that dikes are necessary to protect the country from inundation.

Sea-coast.] The Baltic washes the northern coast for more than 400 miles, and in this distance receives several considerable rivers. At the mouths of all the principal rivers there are large lakes or bodies of fresh water called *Haffs*, which communicate with the Baltic through narrow straits. The first is the *Kurische Haff*, on the coast of East Prussia at the mouth of the Niemen. It is 70 miles long and 30 broad, and is separated from the Baltic by a long narrow tract of land, but communicates with it through a narrow strait at Memel. 2. The *Frische Haff*, at the mouth of the Vistula, is 70 miles long and 14 broad, and communicates with the Baltic through a narrow strait at Pillau. 3. The *Haff*, sometimes called the *Stettin Haff*, on the coast of Pomerania, at the mouth of the Oder, communicates with the Baltic through three straits formed by the islands of Wollin and Usedom and the shore.

Rivers.] The principal rivers, beginning in the east, are, 1. The *Niemen* or *Memel*, which rises in Russia, and flowing N. of W. discharges itself into the Kurische Haff through two mouths. 2. The *Vistula*, which rises in Austrian Silesia, in the Carpathian mountains, and after passing by the free city of Cracow, flows through Galicia and the new kingdom of Poland, and enters Prussia near the city of Thorn, whence it proceeds in a northerly di-

rection till it divides itself into two arms ; the eastern arm under the name of the *Nogat*, falls into the *Frische Haff* near *Elbing*, while the western divides itself into two new arms, one of which, turning to the right, discharges itself also into the *Frische Haff*, and the other turning to the left, passes by *Danizig* to the *Baltic*. Its most important tributaries, are the *Drewenz*, which joins it 4 miles above *Thorn*, and the *Brahe*, which falls into it a little below that city. 3. The *Oder*, which is almost wholly a Prussian river, rises in *Moravia*, and flowing in a N. W. direction through *Silesia*, *Brandenburg* and *Pomerania*, discharges itself into the *Haff* or *Stettin Haff*, after a course of 400 miles, during nearly the whole of which it is navigable. It passes by *Ratibor*, *Oppeln*, *Breslau*, *Frankfort*, *Custrin* and *Stettin*. Its principal tributary is the *Warta* or *Warthe*, which rises near the free city of *Cracow*, and after running at first in a northerly direction through the new kingdom of *Poland*, turns to the west and entering *Prussia*, passes through the provinces of *Posen* and *Brandenburg*, receives the *Netze* and discharges itself into the *Oder* at *Custrin*. 4. The *Elbe* comes from *Saxony* and flowing through the kingdom in a N. W. direction passes into *Hanover*, after having received in its progress the *Schwartz Elster* or *Black Elster* ; the *Mulde*, which joins it in *Anhalt* ; the *Saale*, one of whose tributaries is the *White Elster* ; and the *Havel*, whose principal tributary is the *Spree*, which rises in the eastern part of the kingdom of *Saxony*, and flowing north passes by *Berlin* and joins the *Havel* at *Spandau*. 5. The *Rhine* passes from S. E. to N. W. through the heart of the great western division of *Prussia*, and in its progress receives the *Nahe* ; the *Moselle*, which comes from *France* and being joined by the *Sarre* near *Treves*, falls into the *Rhine* at *Coblentz* ; the *Sieg*, which joins it two miles below *Bonn* ; the *Ruhr* and the *Lippe*.

The other considerable rivers are, the *Pregel*, a navigable stream, which falls into the *Frische Haff*, a little below *Konigsberg* ; the *Stolpe*, the *Wipper* and the *Persante*, which fall directly into the *Baltic*, between the mouths of the *Vistula* and the *Oder* after a short course ; and the *Ucker*, which falls into the *Haff* or *Stettin Haff* at *Uckermunde*.

Canals.] The principal canals are, 1. The *Bromberg canal*, 20 miles long, which connects the *Brahe* with the *Netze*, and thus opens a communication between the *Vistula* and the *Oder*. 2. The *Frederick-William* or *Mullrose canal*, 15 miles long, which begins at *Newbruck* on the *Spree* and terminates on the *Oder*, a little above *Frankfort*, and thus connects the *Oder* with the *Elbe*. 3. The *Finow canal*, 24 miles long, which connects the *Oder* with the *Havel*. 4. The *Plauen canal*, which connects the *Havel* with the *Elbe*, and shortens the navigation between *Berlin* and *Magdeburg*.

Soil and Productions.] The soil in the eastern division is for the most part sandy and covered with heath, but there are also along the coasts and rivers rich marshes and fertile low lands. The western division has many tracts in the highest degree fertile, intermixed with others that are rocky and barren. In most of

the provinces the soil is highly cultivated, but in others, particularly in those east of the Oder, the agriculture admits of much improvement. Wheat, oats, barley and potatoes are raised in sufficient quantity for the supply of the country. Flax, hemp and tobacco are also cultivated, but not to such an extent as to prevent importation. The vine flourishes in the western division, along the banks of the Rhine, the Moselle and the Nahe. Cattle and sheep are raised in almost all the provinces, but the horses for the cavalry are imported from Russia and Holstein. Westphalia has long been celebrated for its hams, and Pomerania for its poultry. In the mountainous districts of the western provinces and in the Hartz are found iron, copper, lead, silver and other minerals. Salt from brine springs is also abundant in some parts of Prussian Saxony.

Chief Towns.] *Berlin*, the capital of the Prussian states, and the residence of the king, is situated in a sandy plain on both sides of the Spree, and is one of the most beautiful cities in Europe. The circumference of its walls is 11 miles. The streets are for the most part broad and straight, and the squares regular and spacious, and adorned with numerous elegant buildings. Berlin is indebted for its chief embellishments to the celebrated Frederick II. who is supposed to have expended yearly in the improvement of the city 400,000 dollars. Among the most remarkable public buildings is the royal castle, which is 430 feet long and 276 broad. In it is the king's library, which contains upwards of 200,000 volumes. The city is highly distinguished for its manufactures: the principal articles are silk, woollen, linen and cotton goods, jewelry, porcelain, &c. The number of manufacturers in the various establishments is about 16,000, of which number nearly 3,000 are in the extensive silk manufactories, and 500 in the royal porcelain manufactory. The population has greatly increased during the last 150 years; in 1661 it was only 6,500; in 1818 it was 182,387, or including the military 188,485.

Breslau, the capital of Silesia, stands on the left bank of the Oder, at the influx of the small river Ohlau which runs through the town. It is surrounded with strong walls and other fortifications. Breslau is the centre of trade for the whole of Silesia, and the manufactures of the town employ several thousand workmen. Four fairs are held here annually. The population, including the military, is 76,313.

Königsberg, the chief town in East-Prussia, is on the Pregel, 4 miles from its mouth. The river flows from east to west, and approaches the city in two arms, which join and form a small oblong island. On this island is built a part of the city, and the rest stands opposite to it, on the north bank of the river. The houses have their foundations on piles as at Amsterdam. Königsberg is connected with the interior by the Pregel, and carries on a considerable trade with foreign countries. The population is 63,239.

Dantzic, an opulent commercial city of West Prussia, is situated on the left bank of the Vistula, about 5 miles from its mouth. It is surrounded with ramparts, but a more effectual defence consists

in the power of laying the country on one side under water, and of resisting assailants on the other from fortified heights. The harbor is formed by the mouth of the Vistula, and is also defended by forts. The commerce of Dantzic is very extensive, and consists chiefly in the export of corn, potash, timber, hemp, flax, &c. from Prussia and Poland, and the import of merchandise from all parts of Europe. The population is 52,821.

Cologne, in the province of Cleves-Berg, is situated in a flat country, on the left bank of the Rhine, and is built in the form of a crescent, close to the river. The walls have a number of towers, and form a circuit of nearly 7 miles. The streets are in general narrow, winding and gloomy, and the houses ill-built. Cologne carries on considerable commerce, and is celebrated for the manufacture of the famous Cologne water. The population is 54,938.

Magdeburg, in the province of Saxony, is situated in a very beautiful, though flat country, on both sides of the Elbe. It is one of the strongest fortresses in Germany, and in the citadel, which stands on an island in the river, are shown the cells where baron Trenck and La Fayette were successively confined. The manufactures of Magdeburg furnish the basis of a flourishing trade. The population in 1817 was 35,448.

Aix-la-Chapelle, celebrated for its warm baths, and for two treaties of peace concluded here, is in the province of the Lower Rhine, 36 miles W. S. W. of Cologne. It was long the favorite residence of Charlemagne, and for some time the capital of his empire. It is now distinguished for the manufacture of fine broad cloth and needles. The population is 32,300.

Stettin, on the left bank of the Oder, 60 miles from its mouth, carries on an extensive trade, consisting principally of the export of the manufactures of Silesia, and the import of colonial goods and foreign fabrics required by that province as well as by Berlin and some other towns in Brandenburg. Vessels of more than 100 tons are obliged to stop at Swinemunde, at the mouth of the river. The population is 25,000.

Potsdam is 15 miles W. S. W. of Berlin, on the north bank of the Havel, which here spreads its waters in one expanse after another, like a succession of small lakes. Potsdam is to Berlin what Versailles is to Paris, having been since the close of the 17th century, the occasional residence of the court, but indebted for its chief improvements to Frederick II. The streets are regular and spacious, and in some of them the houses resemble rows of palaces. The royal palace on the bank of the Havel is a magnificent structure. The town is surrounded by a wall and ditch; the population in 1818 was 23,642.

Halle, in the province of Saxony, on both sides of the Saale, 56 miles S. by E. of Magdeburg, is chiefly celebrated for its literary institutions, particularly its university. In one of the suburbs is the orphan-house, and Canstein's establishment for printing the Scriptures, erected in 1712, which is said to have produced since

that time nearly 1,000,000 testaments, and 2,000,000 bibles. Population, including the suburbs 25,000.

Frankfort-on-the-Oder is a place of considerable trade, having three annual fairs. It contains 15,453 inhabitants. *Elbing*, near the mouth of the Nogat or eastern arm of the Vistula, 30 miles S. E. of Dantzic, exports large quantities of Prussian and Polish produce. It contains 13,000 inhabitants. *Stralsund* is a commercial town on the strait which separates the island of Rugen from the main land, and contains 15,876 inhabitants. *Erfurt*, on the Gera, 12 miles W. of Weimar, is in a territory almost detached from the rest of the Prussian dominions, and contains 18,000 inhabitants. *Wittenberg*, on the Elbe, 60 miles N. of Dresden, is celebrated as the residence of Martin Luther, and in one of the churches lie his remains and those of Melancthon. *Noumburg*, 28 miles W. S. W. of Leipsic, has two yearly fairs. Population 12,000.

Coblentz is in a delightful country at the confluence of the Moselle and Rhine, opposite the fortress of Ehrenbreitstein. The situation is highly favorable for trade, as it has a direct intercourse with France by the Moselle, and with Germany and Switzerland by the Rhine. The population is 10,500. *Dusseldorf*, on the Rhine, 20 miles below Cologne, contains 19,000 inhabitants. *Munster*, on the small river Aa, about 6 miles from its junction with the Ems, contains 14,000 inhabitants. *Treves*, on the Moselle, has 12,750 inhabitants. *Bonn*, on the Rhine, 14 miles above Cologne, has a university established in 1818 and 10,000 inhabitants. *Cleves*, in the province of Cleves-Berg, is a neatly built town $2\frac{1}{2}$ miles from the west bank of the Rhine, containing 5,000 inhabitants. *Elberfeld*, 20 miles N. E. of Cologne, is extensively engaged in manufactures of various kinds. Population 18,000.

Posen the capital of the province of the same name, is on the Warta, 144 miles E. of Berlin, and contains 22,700 inhabitants. *Thorn*, on the Vistula, 70 miles S. of Dantzic, is famous as the birth-place of Copernicus. It contains 9,000 inhabitants.

Education.] In respect to the cultivation of literature, Prussia holds a high rank among the European states. There is an academy of sciences at Berlin, established by Frederick II. and associations of a similar nature, but on a smaller scale, are established in most of the great towns. The most celebrated universities are at Halle, Berlin, Breslau and Konigsberg; and in many other towns there are colleges or higher schools for instruction in mathematics and the ancient and modern languages. The elementary schools in Brandenburg, Saxony, and part of Prussia proper are numerous and in general well conducted.

Population and Religion.] The population of the Prussian states, in 1818, according to Hassel was 10,154,549, of which number 50,800 were in Newschatel, and 250,000 in the army. The prevailing religion is the Lutheran, but that of the royal family is Calvinistic. All sects enjoy equal rights. The number of the principal denominations a few years since, was as follows; Lu-

therans 6,100,000, Calvinists 350,000, Catholics, 3,500,000, Jews 75,000. In the year 1817 the Lutherans and Calvinists of the Prussian states agreed to lay aside their distinguishing appellations, and to unite in one body under the name of Evangelical Christians. This praiseworthy example will probably be followed in several of the Protestant states.

Government.] Prussia had formerly a representative body under the name of *Estates*. The powers and privileges of the nobility were also very extensive. By degrees the power of the crown, acting with the vigor of unity and concentration, reduced that of the aristocracy; and the sovereign found means to conduct the public business without the intervention of *Estates*, so that the government during the 18th century was an absolute monarchy. Recently, however, the people have manifested an anxious desire for the restoration of the *Estates*, and this has been promised by the king, but as yet (1820) nothing satisfactory has been done.

Debt. Revenue and Army.] The public debt amounts to about £40,000,000 sterling. The revenue is about £6,000,000. The army exceeds 150,000 men, but the whole number of men connected with the military establishment, according to Hassel, is 250,000.

Manufactures.] The manufactures have been patronized to an extraordinary extent by the government, and are in a very flourishing condition. Many articles are produced in greater abundance than is necessary for the supply of the country, and furnish a large surplus for exportation. The most industrious provinces are Cleves-Berg, Silesia, Brandenburg, Saxony and some parts of Westphalia. The principal manufactures are linen, of which Silesia alone produces to the value of several million dollars; woollen goods, for which Silesia is also the most distinguished; and iron ware, which is the staple in Cleves-Berg. Besides these three principal articles, there are cotton goods, leather, tobacco, and numerous others of less importance. Berlin is more distinguished for its manufactures than any other city, and is particularly famous for silk, porcelain and cotton goods.

Commerce.] The situation of Prussia on the Baltic, the many navigable rivers and canals by which it is traversed, and the fine roads which connect the principal towns in the interior, are very favorable to commerce. The foreign trade, however, is not extensive, but there is a very active internal commerce. The principal seaports are Dantzic, Stettin, Königsberg, Elbing and Stralsund. The principal places of trade in the interior are Berlin, Breslau, Magdeburg, Aix la-Chapelle, Coblenz, Cologne, Münster, Naumburg and Frankfort-on-the-Oder. The exports are linen, corn, wool, timber, pitch, tar, potash, &c. and the value of the whole may be estimated on an average at £7,000,000 or £8,000,000. The principal trade is with Great Britain.

Island.] The island of Rugen is opposite Stralsund on the coast of Pomerania, from which it is separated by a channel about a mile broad. It contains 360 square miles and 28,000 inhabitants, and formerly belonged to Sweden, but was ceded to Prussia in 1814.

SPAIN.

Situation and Extent.] Spain is bounded N. by the bay of Biscay; N. E. by France, from which it is separated by the Pyrenees; E. by the Mediterranean; S. by the Mediterranean and the Atlantic; W. by Portugal and the Atlantic. It extends from 36° to 43° 47' N. lat. and from 9° 13' W. to 3° 15' E. lon. The area is estimated at 182,000 square miles.

Divisions.] Spain is at present divided into 31 provinces. The names of several of the old divisions, however, are still in common use. Both are given in the following table.

	Provinces.	Square miles.	Population.	Pop. on a sq. m.
Andalusia,	1. Seville,	9,080	746,200	82
	2. Granada,	9,720	693,000	71
	3. Cordova,	4,202	252,000	60
	4. Jaen,	5,036	207,000	64
	5. Murcia,	7,957	383,000	48
	6. Valencia,	7,764	825,000	106
	7. Catalonia,	12,111	859,000	71
	8. Aragon,	14,822	657,400	44
	9. Navarre,	2,475	221,800	89
Biscay,	10. Biscay,	1,280	111,400	87
	11. Guipuzcoa,	628	104,500	166
	12. Alava,	1,093	67,500	62
	13. Asturia,	3,725	364,200	97
	14. Galicia,	16,060	1,142,600	61
Leon,	15. Leon,	5,943	239,800	40
	16. Palencia,	1,751	118,100	67
	17. Valladolid,	3,272	187,400	57
	18. Zamora,	1,606	71,400	44
	19. Toro,	1,992	97,400	49
	20. Salamanca,	6,128	210,000	34
Old Castile,	21. Burgos,	7,752	470,600	61
	22. Soria,	4,118	199,000	48
	23. Segovia,	3,502	164,000	46
	24. Avila,	2,600	118,100	45
New Castile,	25. Madrid,	1,330	228,500	172
	26. Guadalaxara,	1,970	121,100	61
	27. Cuenca,	11,410	294,300	26
	28. Toledo,	8,863	370,600	42
	29. La Mancha,	7,620	205,600	27
	30. Estremadura,	14,478	428,500	29
	31. Majorca,	1,775	187,000	105
Total,		182,000	10,350,000	57

Capes.] The most noted capes are cape *Ortegal* and cape *Finisterre* in the N. W. ; cape *Trafalgar* near the strait of Gibraltar in the S. W. ; and capes *Gata*, *Palo*, *Nao*, *Oropesa*, *Tortosa*, and *St. Sebastian*, on the coast of the Mediterranean.

Mountains.] The *Pyrenees* form the boundary between Spain and France. All the other mountain ranges in Spain spring from the *Pyrenees* in the following manner. The *Cantabrian* chain runs west, parallel with the northern coast, separating Biscay from Navarre and Asturia from Leon, and terminates at Cape *Finisterre*. Near the middle of the *Cantabrian* chain (about lon. $4^{\circ} 15' W.$) the *Iberian* range separates from it, and stretching at first to the S. E. and then to the south divides Aragon from the two Castiles, and extends under various names in a long irregular line all the way to cape *Gata* in the province of Granada, while short branches are thrown off from it towards the east which terminate at cape *Palo* and cape *Oropesa*. From the *Iberian* range four great chains proceed in a W. S. W. direction, parallel with each other, to the Atlantic ocean. The most northerly of these four chains is called the *Mountains of Castile*. They run near the boundary between the two Castiles and along the northern frontier of Estremadura into Portugal, where they take the name of *Sierra de Estrella*, and terminate at cape *la Roca* a little west of Lisbon. The second chain is the *Sierra de Toledo*, which proceeds through the southern part of New Castile and Estremadura into Portugal, and terminates at cape *Espichel* a little south of Lisbon. The third chain is the *Sierra Morena*, which commences on the eastern boundary of the province of La Mancha, proceeds along the northern frontier of Andalusia, and terminates at cape *St. Vincent*, the S. W. extremity of Portugal. The fourth chain is the *Sierra Nevada*, which is principally confined to the province of Granada, and terminates on the coast of the Mediterranean in various points, the most southern of which is the rock of Gibraltar. The highest single mountains of Spain are in the *Sierra Nevada*, the loftiest summit of which is 12,762 feet above the level of the sea. The highest mountain on the Spanish side of the *Pyrenees* is 7,518 feet, and the highest summit of the *Iberian* range 6,361 feet above the level of the sea. The *Sierra de Toledo* and the *Sierra Morena* are low ranges, being no where higher than 2,700 feet.

Rivers.] The course of the rivers is determined by the direction of the mountain ranges. No large river falls into the bay of Biscay, the *Cantabrian* chain forming a barrier along the whole northern coast. The great rivers are, 1. The *Ebro*, in the northeast, which drains the waters of the valley included between the *Pyrenees* and the *Iberian* chain. It rises in the province of Toro, near the point where the *Iberian* range separates from the *Cantabrian*, and running in a S. E. direction, divides Alava and Navarre from Burgos and Soria, flows through Aragon and Catalonia, and discharges itself into the Mediterranean, near cape *Tortosa*. The principal towns which it passes in its course are Tudela, Saragossa and Tortosa. The river is in general very

rapid, and unfit for navigation, being full of rocks and shoals. 2. The *Guadalquivir*, which drains the waters of the valley included between the Sierra Nevada and the Sierra Morena. It rises in the Sierra Nevada, and in its circuitous course through Andalusia passes by Andujar, Cordova and Seville, and falls into the Atlantic ocean about 20 miles N. W. of Cadiz. It is navigable for large vessels to Seville, and for small vessels to Cordova. 3. The *Guadiana*, which drains the waters of the valley included between the Sierra Morena and the Sierra de Toledo. It rises in the province of La Mancha, and running westward passes by Ciudad Real, Merida and Badajoz, after which it turns to the south, and in the latter part of its course forms the boundary between Spain and Portugal. It is navigable for 40 miles from its mouth. 4. The *Tagus*, which drains the waters of the valley included between the Sierra de Toledo and the mountains of Castile. It rises in that part of the Iberian range which separates Aragon from New Castile, in the province of Cuenca, and passing through the provinces of Toledo and Estremadura into Portugal, discharges itself into the Atlantic 10 miles below Lisbon, after a course of 450 miles. It is navigable only 100 miles from its mouth on account of the rocks, rapids and shallows. 5. The *Duero*, which drains the waters of the wide valley included between the mountains of Castile and the Cantabrian chain. It rises in the Iberian range on the borders of Aragon, and flowing to the westward traverses Old Castile and Leon, forms for some distance the boundary between Spain and Portugal and finally discharges itself into the Atlantic a little below Oporto. It is navigable only 70 miles from its mouth on account of its rapid course.

The rivers of secondary importance are, 1. The *Minho*, which rises in the province of Galicia, near the western extremity of the Cantabrian chain, and flowing in a S. W. direction falls into the Atlantic 15 miles below Tuy, after forming for some distance the boundary between Spain and Portugal. 2. The *Segura*, which rises in the southern part of the Iberian range, and after traversing the province of Murcia in an easterly direction, falls into the Mediterranean 16 miles S. S. W. of Alicante. 3. The *Jucar* or *Xucar*, which rises in the Iberian range in the province of Cuenca, and flowing in a S. E. direction passes through the province of Valencia and falls into the Mediterranean.

Face of the Country, Soil and Climate.] Chains of mountains intersect the country in all directions. The tracts included between the different ranges consist generally of plains, some of which are elevated, particularly in the two Castiles where they form an extensive table land several thousand feet above the level of the ocean. The soil is generally light, and where well watered very fertile, but when water fails it is dry and barren. The most fertile districts are Asturia, Estremadura and the Mediterranean provinces, especially Andalusia and Valencia. The climate is very various. The elevated plains in the interior are

liable to piercing winds and are unsuitable to the production of various fruits, which in Italy flourish in more northern latitudes. The provinces on the Mediterranean are often visited by a scorching wind from Africa called the *Solano*, which lasts 10 or 12 days, and like the *Sirocco* of Italy, destroys, while it lasts, all the energies of body and mind.

Productions.] Grain is cultivated in all the provinces, but not always in sufficient quantities for the supply of the country. In the warm climate of Granada, coffee, cotton, sugar, and cocoa are produced in abundance. Vines are cultivated in every province, but the most celebrated wines are those of Alicante in Valencia; Malaga, in Granada; and especially Xeres de la Frontera in Seville, which produces the famous Xeres, or Sherry wine. The other fruits are olives, oranges, lemons, almonds, and in the warmest provinces the pomegranate and the palm. Silk is one of the staple productions of Spain. The *mineral* productions are iron, copper, lead, tin and quicksilver, all in abundance. The iron works of Biscay, Aragon and Asturia have been of great note for several centuries. Spain was anciently celebrated for its mines of gold and silver, but since the discovery of much richer mines in America they have not been worth working, and now lie neglected. There are indications of coal mines in several provinces, though they are as yet wrought only in Astoria. Salt forms one of the chief products of Spain, but it is obtained chiefly by the evaporation of sea-water.

Animals.] The Spanish horses are famous for their beauty and elegance of shape, particularly those of Andalusia. The horned cattle of Andalusia are also celebrated; but these and every species of domestic animal are neglected except the sheep, on which great care is bestowed, and the Spanish wool has in consequence long been famous as the finest in the world. The number of sheep in Spain is estimated at 13,000,000, of which 5,000,000 are Merinos or wandering sheep. The Merinos in winter occupy the plains of Estremadura, Andalusia and Leon, but in summer they are driven for fresh pasture to the mountainous tracts of the Castiles and Biscay. These migrations begin at the end of April, or the early part of May, and take place in flocks, of about 10,000 sheep in each, conducted by about 50 shepherds, under the charge of a mayoral or officer of responsibility. The progress of such numerous flocks is necessarily slow, a journey of 400 or 500 miles, requiring 30 or 35 days. In autumn a similar journey is requisite to bring the flocks from the high ground to the plains. Migrations of so frequent occurrence, and to so great an extent, necessarily require peculiar regulations, and have given rise to the *Mesta*, an association authorised by government to decide all questions between the shepherds and the farmers through whose lands the migrations take place.

Inland Communication.] Spain labours under great disadvantages of inland communication. None of the large rivers are navigable except for a short distance from their mouths. The

roads are also rendered difficult by the mountainous nature of the country: they are good only between the large towns, the cross roads being in general so bad as to necessitate the carriage of commodities on the backs of mules and horses.

Agriculture.] Agriculture is very backward in Spain. Scarcely a twelfth part of the land is cultivated and many of the finest tracts are allowed to lie waste. It is supposed that with proper care the soil would support three times as many inhabitants as it does at present. This neglect of agriculture is attributed to various causes; partly to the badness of the roads and the want of canals, which prevent the inhabitants from bringing their produce to market; partly to the monopolies and impolitic restrictions of the government; partly to the religion, which encourages the observance of an absurd number of holidays; and partly to the natural indolence of the Spaniards who hate and despise all labor. The best cultivated provinces are Biscay, Galicia, Catalonia, Valencia and a part of Granada.

Chief Towns.] *Madrid*, the capital of Spain, is situated near the centre of the kingdom, in New Castile, on the small river Manzanares, in lat. $40^{\circ} 25' N.$ and lon $3^{\circ} 12' W.$ It stands on several small eminences in the centre of a large plain, which is elevated 2,300 feet above the level of the sea. It is surrounded by a high earthen wall but has no ditch or other means of defence. Most of the streets are strait, wide, clean, well paved, and well lighted. There are numerous squares adorned with statues and fountains but the most distinguished is the Plaza Mayor, which forms a regular oblong in the centre of the city, 1,536 feet in circuit and inclosed by 136 houses, all uniform and five stories high, with balconies and porticoes supported by pillars. This is the scene of the bull-fights and public executions. The most remarkable public building is the royal palace at the west end of the town, which is of a square form, presenting four fronts of 404 feet each, and is 86 feet in height, and incloses in the middle a court 120 feet square. It is strongly built; its walls are thick, its foundations deep, its pillars strong, and every room is vaulted, no wood being admitted into its construction. It is elegantly ornamented on the outside, and in the interior are many spacious apartments, and a large collection of paintings by the best masters of Flanders, Italy and Spain. The chief defect is the want of gardens. Of the public walks of Madrid, the principal is the Prado, which makes so conspicuous a figure in Spanish romances and plays. It runs along the east and north sides of the city, and is planted with trees. Madrid enjoys almost always a cloudless sky, and a pure and serene atmosphere, but the air is extremely keen, owing to the elevated situation, and produces very severe effects on weak constitutions. Madrid has little trade and prospers chiefly from the presence of the court. The population is estimated at 168,000.

Cadiz, in the province of Seville, stands on the island of Leon at the extremity of a long tongue of land which projects in a N. W. direction. The town is walled, and on three sides sur-

rounded by the sea, while strong fortifications across the isthmus secure it from attack by land. The bay of Cadiz is a vast basin, inclosed between the continent and the projecting tongue of land, and is one of the finest bays in the world, being more than 30 miles in circumference, with excellent anchoring ground, while the neighboring mountains protect it to a considerable extent from the winds. It is defended by four forts, and is the grand rendezvous of the Spanish navy. On an island in the bay there are 12 docks, and a grand arsenal with ample supplies of naval stores. The streets are narrow, but clean, well paved and well lighted. The town and the country-seats in its neighborhood make a beautiful appearance from the harbor. The manufactures of Cadiz are insignificant but the commerce is very extensive. It has long been the principal commercial town in Spain, and particularly the centre of trade with America and the West Indies. Large quantities of salt are made in the neighborhood for exportation. The population is estimated at 70,000 souls, many of whom are Irish, Italian, French, English and Dutch.

Barcelona, the capital of Catalonia, and one of the most flourishing cities in Spain, is a strongly fortified town on the shore of the Mediterranean on a plain, encircled at a short distance by hills in the form of an amphitheatre. The harbor is deep, spacious and secure, but difficult of entrance. The commerce of Barcelona is more extensive than that of any city in Spain except Cadiz. The manufactures consist of silk, cotton and woollen goods, shoes, glass, cutlery and fire-arms, all of which are exported in considerable quantities, together with wine and brandy. Among the principal imports are corn, cod-fish and rice. The population, including the suburbs, is estimated at 140,000.

Valencia, the capital of the province of the same name, stands on the Guadalaviar about a mile and an half from its mouth, in the midst of a fertile and beautiful country, which is every where crowded with villages and orchards. It has no harbor, but only a bad road without anchorage or shelter. Vessels seldom approach nearer than half a league, and receive and discharge their cargoes by means of boats. The city is chiefly noted for its silk manufactures, which are among the most extensive in Europe, giving employment to 25,000 persons and consuming yearly 900,000 lbs. of raw silk. The trade of the town is extensive, notwithstanding its unfavorable situation, and the population is estimated at more than 100,000.

Seville stands in a large circular plain, on the left side of the Guadalquivir, 54 miles from its mouth, in the midst of a country well cultivated and adorned with villas and orchards. It is the most extensive city in Spain, and is said to have had formerly when in possession of the Moors, a population of 400,000 souls. It is surrounded by an old wall, 5 or 6 miles in circumference, and containing 166 turrets. After the discovery of America, Seville was invested with the monopoly of the trade between that country and Spain, but the difficulty of navigating the Guadalquivir with large vessels, led to its transfer to Cadiz. Vessels

drawing more than 10 feet water are obliged to unload 8 miles below Seville, and the largest vessels stop at the mouth of the river. The manufactures of silk, leather, and some other articles, is carried on to a considerable extent. Here also is the royal tobacco manufactory, which supplies the whole kingdom with cigars, snuff and tobacco, and gives employment to 1,500 persons and 190 horses or mules. The population of Seville is estimated at 100,000.

Granada, a celebrated city in the province of the same name, is romantically situated on the river Xenil or Genil, 123 miles E. of Seville, on two hills at the extremity of an immense plain surrounded by lofty mountains. The town makes a fine appearance to the approaching traveller, the houses rising one above another, with turrets and gilded cupolas, and the whole crowned by the Alhambra, or palace of the ancient Moorish kings, and in the back ground the Sierra Nevada covered with snow; but on entering the gates this grandeur disappears; the streets are found to be narrow and irregular, and the buildings bear visible marks of decay. The Alhambra however still retains much of its ancient magnificence and is the grand ornament of the city. Its chambers are all paved with marble, and ornamented with marble pillars. The population of Granada is estimated at 67,000. They are employed chiefly in manufacturing silk stuffs, woollen goods and other articles.

Malaga, celebrated for its wines, is situated on the coast of Granada, at the bottom of a deep bay, with a large plain to the north, while on the east and west it is sheltered by lofty mountains, whose sides are covered with vineyards and plantations of olive, almond, orange and lemon trees. The harbor is easy of entrance, perfectly sheltered from all winds, sufficiently capacious to contain about 400 ships, and so deep that vessels of the largest burden can come up close to the quays. The town is fortified and contains 52,000 inhabitants.

Saragossa, the capital of Aragon, stands in an extensive and fertile plain on the right bank of the Ebro, which here receives the Guerva, a considerable stream, from the south, and the Gallego, which has its source in the Pyrenees, from the north. Without being regularly fortified it is surrounded by an earthen wall, and is entered by 12 gates. The houses are built throughout of brick. It contains 55,000 inhabitants and a university founded in 1478. Saragossa is celebrated for its dreadful sieges by the French in 1808 and 1809, in which the Spaniards displayed the most unyielding fortitude.

Pampeluna, the capital of Navarre, is situated on the Arga, a branch of the Ebro. It stands partly on an eminence and partly on a plain, and is surrounded by mountains at the distance of 6 or 8 miles. The town is walled and has two citadels, and has long been accounted one of the principal strong holds in the north of Spain. Population, 14,000.

Bilboa, the capital of Biscay proper, is on a small river about 6 miles from the sea. It has a spacious harbor, and carries on

an extensive commerce ; the wool of Spain being mostly exported through this channel to England, France, Holland and other countries, while the whole of the north of Spain is supplied from this place with foreign merchandize. Population 15,000. *Alicant* is a well built maritime town in the province of Valencia on a peninsula, in a bay of the Mediterranean, at the bottom of a rocky mountain, on the summit of which is the castle. The commerce of the town is considerable, especially in wine and soap. Population 17,000.

Ferrol, an important sea-port and one of the principal stations of the Spanish navy, is on the north coast of Galicia at the influx of a small river into the bay of Corunna. The harbor is deep, safe and capacious, and the entrance narrow and well defended by forts. The town is strongly fortified. Here are marine barracks for the accommodation of 6,000 men, dock-yards, arsenals, rope-walks and magazines of naval stores of all kinds. Population 10,000. *Carthagen*, the principal station of the navy in the Mediterranean, is an old and well known sea-port on the coast of Murcia, founded by the Carthaginian general, Asdrubal. The harbor is the best in the Mediterranean, if not in Europe. It consists of a natural basin of great depth, reaching close to the town and secured from every wind by the surrounding hills and by an island near the entrance. The town stands on a peninsula in this basin and contains 25,000 inhabitants.

Aranjuez, the residence of the court during a part of the year, is on the Tagus, 20 miles from Madrid, with which it is connected by a superb road, constructed on the model of the ancient Roman roads. Here is a beautiful royal palace with elegant gardens. Population 10,000. *Escorial* is a village of 2,000 inhabitants, situated in a dreary uncultivated country, 20 miles N. W. of Madrid, but celebrated for its palace, which is a magnificent structure erected at an expense of £3,000,000 sterling. *St. Ildefonso* is a small town 40 miles north of Madrid, containing the royal palace of La Granja with its beautiful gardens. It is the highest royal residence in Europe, being at an elevation of 3,800 feet above the level of the sea. Population 4,300.

The other considerable towns are, 1. *Burgos*, the capital of the province of the same name, which is on the river Arlanzon, 112 miles N. of Madrid, and has considerable commerce in the exportation of the wool of Old Castile, most of which passes through this town to Bilboa. Population 9,000. 2. *Salamanca*, celebrated for its university, is 153 miles W.N.W. of Madrid, on the river Tormes, a branch of the Duero. Population 13,600. 3. *Budajos*, the capital of Estremadura, is in a beautiful plain on the Guadiana. It was always a place of strength and now forms an important barrier fortress on the side of Portugal, from which it is distant only $4\frac{1}{2}$ miles. It was taken by storm by the British, under lord Wellington, after a memorable conflict on the 6th of April 1812. Population 14,500. 4. *Toledo* is on the Tagus, 32 miles S. S. W. of Madrid, on a rock almost surrounded by the river. Two centuries ago it is said to have contained 200,000 in-

habitants, but the number is now reduced to 25,000. It was formerly celebrated for the exquisite temper of its sword blades. 5. *Xerez de la Frontera*, 15 miles N. N. E. of Cadiz, contains 40,000 inhabitants. Its environs are celebrated for the excellent wine corruptly called Sherry. 6. *Ecija* is beautifully situated on the west bank of the Xenil or Genil, 55 miles E. N. E. of Seville, and contains 28,000 inhabitants. 7. *Cordova*, the capital of the province of the same name, is an old and famous city at the foot of a branch of the Sierra Morena, on the north bank of the Guadalquivir, which is navigable to this place for small vessels. Population 30,000. 8. *Jaen*, the capital of the province of the same name, is 36 miles N. of Granada, and contains 27,500 inhabitants. 9. *Murcia* is on the Segura, in the midst of a spacious and beautiful valley containing large numbers of mulberry trees. It has an extensive establishment for twisting silk. Population 35,000.

Education.] The universities of Spain, formerly 24 in number, have been gradually reduced to 11, and of these, few are either well conducted or much frequented. The antiquated system of logic and other parts of scholastic philosophy, continued to be taught until the middle of the 18th century, and though many improvements have since been adopted the Spanish universities are still greatly behind those of France, Germany or Great Britain. There are numerous schools, many of which are connected with the monasteries; and the instruction given is replete with superstitions and antiquated notions.

Population.] The population in 1803 was 10,350,000, and it is supposed that the number has not increased since. Spain has for a long time been one of the least populous countries in Europe. This deficiency is attributed by some to the expulsion of the Jews and Moors, to the contagious fevers in the south, to the intestine wars with the Moors carried on incessantly for 7 centuries, to the emigrations to America, and to the vast number of clergy who never marry. A more operative cause than either, and perhaps than all these, may be found in the extreme indolence of the inhabitants.

Classes of Society.] In Spain, as in Germany, there prevails a great deal of aristocratic pride, and a scrupulous distinction of classes. The nobility bear the titles of duke, marquis, or count, and are styled collectively, *Titulados*. The gentry are called *Hidalgos*, a term applied to all who are of genteel birth or whose designations, such as doctor in law, or doctor in medicine, distinguish them from the mass of agriculturists, merchants and manufacturers. In some provinces these distinctions are little attended to, but in others, as in Biscay and Asturia, almost all the inhabitants lay claim to rank.

Character.] In respect to the character of its inhabitants, Spain exhibits great variety, having been peopled from very different quarters, and the difficulty of communication between the different provinces having prevented that approach to uniformity which constant intercourse would have produced. Indolence is the vice of the inland and southern provinces; it may in fact be

termed the vice of the nation, though striking exceptions are afforded by the inhabitants of Biscay, Galicia, Valencia and above all, of Catalonia. The Castilian is haughty, grave, distant, dignified, mistrustful, and usually well informed and intelligent. The Andalusian is lively, idle, vain, extravagant and licentious. The Galicians leave their own country, and are employed in the rest of Spain, in the lowest occupations, as in sweeping chimnies and cleaning shoes. Most of the servants are Asturians; they are faithful, not very intelligent, but exact in the performance of their duty. All the mountebanks and tumblers come from Valencia.

[*Manners and Customs.*] The dress of the Spaniards, formerly national and peculiar, now resembles that of the English and French, but the cloak, the long sword and the large round hat are still occasionally worn. The favorite national amusement of bull-fighting was discouraged by government towards the close of the last century, but has since been revived. These fights take place in amphitheatres prepared for the purpose. The animal is first attacked by horsemen, armed with lances; then by men on foot, who carry a kind of arrow terminated like a fish-hook, which gives the animal exquisite pain, and redoubles his fury. When the bull is almost exhausted, a man, called the *matador*, advances with a long knife, and usually with a single blow terminates his sufferings. If the animal appears deficient in spirit, a pack of dogs is let in; several of which are commonly killed before their purpose is accomplished. Frequently six or eight of the horses are killed in a single fight, and sometimes, though rarely, one or more of the human combatants. Notwithstanding the wanton cruelty of this amusement, both sexes, of every age and rank, crowd to a bull-fight day after day with enthusiasm, and gentry and nobles do not disdain to appear as combatants.

[*Government.*] The government of Spain was long a limited monarchy, the people being represented by their Cortes, an assembly which, though rude and constituted on principles very different from those of true representation, performed the duty of guarding the public purse, and of making known the public grievances. But after the union in the 15th century of the different provinces into one kingdom, the concentration of power in the hands of the monarch, enabled him to dispense with the Cortes, and to encroach on the privileges of the provinces; so that on the accession of the house of Bourbon in 1700, there remained hardly any vestige of independence, except in Biscay. The dissatisfaction and indignation of the people, excited by the conduct of the present king, led, in the beginning of 1820 to open insubordination in the army, and has produced a revolution of great importance, by which the constitution of the Cortes, on an improved plan, is restored, and such salutary restraints have been imposed on the power of the crown, as seemed best calculated for securing the rights of the people. The revolution has not been confined to changes in the form of government, but has extended to the reformation of ecclesiastical abuses, and to the abolition of the pri-

age formerly possessed by all persons of good family, of entail- ing their estates, the number of these entails being considered one of the chief causes of the backward state of the country. The title of the king of Spain is "His Catholic Majesty;" that of the heir apparent is "prince of Asturia;" the other princes of the royal family are called *Infants*, and the princesses *Infantas*. The affairs of the colonies are committed to the management of the council and chamber of the Indies, resident at Madrid.

Religion.] The Catholic religion was, till 1820, the only religion tolerated in Spain. The Inquisition, which was abolished by Bonaparte during his temporary ascendancy, was restored by the present king in 1814; but in 1820 it was again abolished, it is to be hoped, for ever. The clergy in Spain are excessively numerous, consisting of 8 archbishops, 61 bishops and not less than 40,000 minor clergy, distributed through 18,371 parishes. In addition to these, there were recently 2,000 monasteries containing nearly 50,000 monks, and 1075 convents with 20,000 nuns. Part of these monasteries and convents are now (1821) abolished, and the inmates allowed a small pension for life, government having appropriated their lands to the public treasury.

Army and Navy.] The army consists at present of about 50,000 men, besides the national militia. The strength of the Spanish army has varied greatly of late years: its general character is courage in the soldiers and a want of professional knowledge in the officers. The Spanish navy suffered severely from the war with England, begun in 1796; and still more at the battle of Trafalgar in October 1805. It formerly contained 42 ships of the line, 30 frigates and numerous smaller vessels; but at present it is in a very inefficient state, and is reduced to 5 sail of the line, 10 frigates, and 65 smaller vessels.

Revenue, Debt, &c.] The revenue in 1817 was about £6,000,000. The expenditure, for several years, has constantly exceeded the revenue, and frequently by more than £1,000,000. The interest on the national debt is £1,150,000. The revenue from the American mines was formerly considerable, but this source of income may now be considered as finally lost.

Manufactures.] In a country abounding with the finest wool, flourishing manufactures of that article might be expected, but such is the indolence of the Spaniards, that Spain is obliged to import a part of her woollen cloths from England and France. In like manner, notwithstanding the productive mines of Biscay, she imports a great part of her hard-ware; so that except in Catalonia, where both silks and cottons are made in large quantities, the only manufactures conducted with spirit in Spain are the twisting of silk, the tanning of leather, and the working of Esparto grass (Spanish broom) into matts, baskets, shoes and other articles.

Commerce.] The exports from Spain consist chiefly of wool, wine, brandy, fruit, olive oil, silk and salt. In return the chief imports are woollen cloth, hard-ware and cottons from England; linen from Germany and Ireland; woollens, jewelry and paper

from France; naval stores from the Baltic; corn from the Black sea and the Baltic; and salt fish from Newfoundland. The trade with Europe is almost entirely passive, being carried on principally by the British, French, Dutch, Danes, Swedes and North-Americans. The most important branch of Spanish commerce was, till recently, the trade with the colonies, consisting chiefly of the import of silver and gold from the American mines, and the export of European manufactures. This commerce was carried on by the Spaniards themselves, but since the emancipation of South America it seems to be rapidly passing into the hands of the English.

Curiosity.] Montserrat, a single mountain in Catalonia, about 30 miles N. W. of Barcelona, is remarkable for its hermitages and a rich monastery of Benedictines. It is about 24 miles in circumference and rises to the height of 3,300 feet above the level of the sea. The monastery is about half way up the mountain and contains a miraculous image of the Virgin Mary, which attracts an immense number of pilgrims. All the poor who come here are fed gratis for three days; and all the sick are received into the hospital. The monks, about 60 in number, live in a reclusive manner and adhere to very rigid rules of abstinence. Higher up the mountain are 13 hermitages, each having a small chapel, a cell, a well in the rock, and a little garden. The hermits are chiefly persons of family and fortune, who have retired from the world to devote themselves to meditation and silence. A mule is sent weekly from the convent with 13 baskets of provisions, one for each of the hermits. One of the hermitages is very curiously and awfully constructed between two narrow projections of the rock, and though it is 2,500 paces distant from the monastery by the path, it impends so much over it that the music in the church below can be heard very distinctly. The scenery of the mountain has an uncommon mixture of the sublime and beautiful. The traveller meets with delightful vallies in the midst of threatening rocks, finds shade and verdure surrounded by sterility, and sees natural cascades rushing from the steepest points of the mountain to fertilize the scattered gardens.

Islands.] The principal Spanish islands are the *Balearic islands*, the largest of which are Majorca, and Minorca, and the *Pithyusae islands*, consisting of Ivica, Formentera and several smaller islands. The two groupes, taken together, constitute the province of Majorca.

Majorca, the largest of the Balearic isles, is situated in the Mediterranean, 100 miles from the coast of Spain. It contains 1,400 square miles, and about 136,000 inhabitants, of whom no less than 3,700 are priests, monks or nuns. The surface is partly level and partly mountainous, the climate is mild, and the soil generally fertile, particularly in the south and east. The principal productions are wine, oil, oranges, almonds, figs, and other fruit, all of which are exported. *Palma*, the capital, is a fortified town at the bottom of a large bay on the S. W. side of the island. It has a good harbor, and considerable trade. Population 30,000.

Minorca lies 37 miles E. of Majorca. It contains 240 square miles and 31,000 inhabitants. The surface is rough and hilly. The productions are in general the same with those of Majorca. The importance of the island in a political sense has been altogether owing to the valuable harbor of Port Mahon on the S. E. side of the island. This harbor is one of the safest and most convenient in the Mediterranean, with sufficient depth and extent to hold a fleet of ships of war. It was the excellence of the harbor of Port Mahon that made the possession of Minorca an object of so much importance to the British during the last century, until the acquisition of a still better naval station in Malta. The British owned Minorca, with one short interruption, from 1708 to 1781.

Ivica, situated about 40 miles from the coast of Spain, contains 190 square miles and 15,200 inhabitants. It is full of mountains and covered with verdure, and presents at sea a grand and agreeable picture. Along the coast there are watch towers, erected on the principal elevations, from which a vessel at sea may be seen at a great distance, and an alarm given in case of danger; a necessary precaution, on account of the vicinity to Barbary, the corsairs from which used to make frequent descents on the coast. Each district furnishes its quota to form a militia to repel the inroads of these barbarians. The climate is mild, and the soil fertile, producing corn, wine, oil, fruit, flax and hemp. Salt is made here in large quantities by natural evaporation. *Ivica*, the capital, is a fortified town on the S. E. side of the island, with a good harbor and 2,700 inhabitants. *Formentera* is a small island lying south of *Ivica*, with 1500 inhabitants.

GIBRALTAR.

Gibraltar is a well known promontory in the south of Spain, at the entrance from the Atlantic into the Mediterranean, near the part where the sea between Europe and Africa is narrowest. It consists of a great rocky mountain running from north to south about three miles in length, from half a mile to three-fourths in width, and from 1200 to 1400 feet in height. On the north side is an isthmus, about a mile and a half in length and half as much in breadth, which connects this vast mass of rock with the continent. The northern front of the rock is almost perpendicular: the east side is full of frightful precipices, while the south, being narrow and abrupt, presents hardly any possibility of approach. On none of these sides has this tremendous mass ever been attacked; there remains only the western front, which is almost as abrupt as the others, but which may be approached by shipping from the bay. Here accordingly have the efforts of assailants been directed, and here are the great batteries and works of defence.

The importance of Gibraltar arises chiefly from its bay, which is very spacious, (9 miles long and 5 broad,) and forms a convenient naval station, being protected from the more dangerous

winds. The eastern side of the bay is formed by the promontory and isthmus; to the south is the sea; the other sides are formed by the mainland of Spain, but the command of the bay depends on the possession of its formidable promontory. The town of Gibraltar stands at the foot of the promontory on the N. W. side. It is strongly fortified, particularly on the side towards the bay, where there are walls within walls, double and treble outworks, but its chief protection after all is derived from the batteries on the neighboring heights, which sweep both the isthmus and the approach to the town by water.

Gibraltar was first fortified in the modern style in the reign of the emperor Charles V. It was taken by the English in 1704, and has since been repeatedly besieged, but always without success. The most memorable attack was in 1782, when general Elliot successfully defended the place against the combined forces of France and Spain. Since that time the British have spent large sums in improving the fortifications. Excavations of great extent have been made by gunpowder in the solid rock, to establish communications between the different posts, and enable them to be relieved without a loss of lives from the enemy's fire; and the place may now be considered as absolutely impregnable to any military force and can be reduced only by treachery or starvation. The number of the garrison at present is 3,000; in time of war it is much greater. The population of the town, including the military, is about 13,000, partly British, partly Spaniards, Italians, Jews and even Moors, all attracted hither by mercantile considerations. The commerce of the place embraces a great variety of articles, being derived not from the produce of any particular tract of country, but from the fitness of the town for a general entrepot. Cottons and other manufactures of England; sugar, rum and other produce of the West-Indies; tobacco, rice and flour from North America, are imported here from the west; while wine, fruits, silk, wax and other Mediterranean articles are brought in from the east.

PORTUGAL.

Situation and Extent.] Portugal is bounded N. and E. by Spain, S. and W. by the Atlantic. It extends from $36^{\circ} 56'$ to $42^{\circ} 7'$ N. lat. and from $8^{\circ} 15'$ to $9^{\circ} 30'$ W. lon. Its form is oblong; its length from N. to S. is 350 miles and its average breadth about 120. The area is estimated at 40,875 square miles.

Divisions. Portugal is divided into six provinces as follows:

Provinces.	Square Miles.	Population	Pop. on a sq. m.	Chief towns.
Entre Duero } è Minho, }	3,490	907,965	260	Oporto.
Tras os Montes,	5,450	318,605	58	Miranda.
Beira,	8,725	1,121,595	129	Coimbra.
Estremadura,	9,855	826,680	84	Lisbon.
Alentejo,	10,575	380,480	36	Evora.
Algarve,	2,780	127,615	46	Tavira.
Total,	40,875	3,683,000	90	

Mountains and Rivers.] Several of the great mountain chains of Spain penetrate into this country and terminate in large promontories on the Atlantic coast. The largest rivers also come from Spain and merely terminate their course in Portugal. The principal are the *Minho*, which forms part of the northern boundary, the *Duero*, the *Tagus*, and the *Guadiana* which in two places forms part of the eastern boundary.

Face of the Country and Climate.] The country is intersected by several mountain ranges, and between the different ridges are numerous picturesque vallies; but the only plains of great extent are one to the south of the Tagus, near Santarem, and another on the coast of Beira. The climate of Portugal is in general more mild and pleasant than in Spain, the heat being tempered by the sea-breezes all along the coast, and by the north wind in the interior. Snow seldom lies in the vallies, and the winter resembles the spring of more northern climates.

Soil and Productions.] The soil is generally light and sandy, but where it is well watered is very fertile. Wheat, barley, oats, flax, hemp and other productions of a northern latitude are raised in the high grounds; vines and maize in those of warmer temperatures; and rice in the low grounds. The chief fruits are olives, oranges and lemons. The mineral productions of this country are numerous, though none but iron mines have as yet been wrought. Of salt large quantities are formed in the bays along the coast by natural evaporation.

Agriculture.] The cultivation of the soil is very much neglected in the southern provinces, owing to the ignorance and indolence of the peasantry. Nothing can be more awkward than their implements. The plough is composed of three pieces of wood, and often encumbered with two clumsy wheels; the harrow and hoe are nearly unknown; even threshing is seldom practised, the grain being separated from the straw by the old method of trampling it under the feet of horses and oxen. Almost two thirds of the country is uncultivated, and the quantity of corn raised is not more than half enough for the supply of the inhabitants. In some of the northern provinces, particularly in Entre Duero è Minho, the case is very different. The people are industrious, and the lands are well watered partly by natural

streams, and partly by artificial irrigation. Here, accordingly, the hills are covered with vineyards to their tops; olive, orange, apricot and other fruit trees are abundant; while in situations of less warmth, wheat, barley and oats are carefully cultivated. The province of Entre Duero e Minho is in short one of the most populous agricultural districts in Europe.

Chief Towns.] *Lisbon*, the capital, is built on several hills on the N. bank of the Tagus, which here expands into a fine body of water several miles in breadth. It is unfortified, and open on all sides. The harbor is one of the best in Europe, uniting in a very unusual degree the four qualities of size, depth, security and convenience. The entrance, at the mouth of the Tagus, is defended by several forts. The appearance of Lisbon at a distance, particularly from the S. E. is extremely beautiful and picturesque: the great body of water, the number of ships which lie at anchor, and cover it like a forest, the city extending in the form of an amphitheatre along successive elevations, the hills in the back ground, covered with villas, churches and olive plantations, all concur to form a picture which is scarcely surpassed by the view of Constantinople. But the interior of the city ill corresponds to its external beauty; the streets are generally narrow and irregular, and although less dirty than in former times, have still much that is offensive. There are, however, several spacious squares, and many splendid houses, and the principal quays are said to exceed in beauty every thing of the kind in London or Paris; but the noblest specimen of architecture is the aqueduct, to the north of the city. It rests on a long row of marble pillars, is nearly half a mile long and is carried across the vale of Alcantara from one mountain to another on 75 arches. It was built in the years 1713—1732, and remained unhurt by the great earthquake of 1755, which destroyed the greatest and best part of the city. The commerce of Lisbon is very extensive, comprising all the colonial and perhaps three fourths of the foreign trade of the kingdom. The population is estimated at 230,000, of whom a large number are foreigners, mulattoes and negroes.

Oporto, the capital of Entre Duero e Minho, and next to Lisbon, the most populous, wealthy and commercial town in Portugal, is on the Duero about 4 miles from its mouth. The river forms a spacious and secure harbor, but the entrance is difficult and dangerous, and requires a pilot and great care to avoid the rocks and sand-banks; and on this account it is so secure that the Portuguese government have but partially fortified it. The principal trade is in wine, of which upwards of 80,000 pipes are exported annually. The population, including foreigners, is 74,000.

Elvas is a strong frontier town, in the province of Alentejo, situated on a rocky hill not far from the Guadiana, and three leagues to the west of the Spanish fortress of Badajoz. It is one of the most important strongholds in the kingdom. Here is a large arsenal and manufactory of arms, spacious and bomb proof barracks, and an immense cistern, supplied with water by a

remarkable aqueduct, 4 miles in length, and supported by three arches one over the other. The population is about 16,000.

Coimbra, the capital of Beira, and formerly the residence of the kings of Portugal, is a fortified town 60 miles S. of Oporto, on the north bank of the Mondego, which is here crossed by an elegant stone bridge. The town rises beautifully along the side of a hill in the form of an amphitheatre; but is in the interior narrow, crowded, ill paved and dirty. It contains 12,000 inhabitants and a celebrated university.

Braga, 27 miles N. N. E. of Oporto, has 13,000 inhabitants, and a manufactory of small hats which supplies a great part of Portugal. *Setubal* or *St. Ubes*, is a considerable town on a bay of the Atlantic, 16 miles S. E. of Lisbon. It has a commodious harbor and an active trade, particularly in bay salt, of which no less than 200,000 tons are made here annually. The population is 12,000. *Evora*, the capital of Alentejo, is a fortified town, situated on an eminence in a vast elevated plain, 65 miles E. of Lisbon. The population is 12,000. *Santarem* is a considerable town, on the right bank of the Tagus, 47 miles N. E. of Lisbon. It contains 8,000 inhabitants.

Education.] The only university in Portugal is at Coimbra. It consists of 13 colleges and has 39 professors, viz. eight of theology; nine of canon law; eight of civil law; six of medicine, four of mathematics and four of philosophy. The average number of students is 300. Education, generally, is very much neglected, although within a few years many improvements have been adopted. Schools on the plan of Bell and Lancaster have been introduced, and in 1820 they contained nearly 5,000 pupils.

Population.] The population, according to an estimate founded on the last return of the number of houses, in 1798, was 3,683,000. The province of Entre Duero e Minho is much the most populous, and next to this are Beira, and Estremadura. The southern provinces are very thinly peopled. With respect to rank, the higher classes are divided as in Spain into the *Titulados* or high nobility, and the *Fidalgos* or gentry. The peasantry, though not in a state of servitude, are subject to a system of mismanagement, the effects of which are nearly as bad as those of direct oppression.

Character.] The national character of the Portuguese is similar to that of the Spaniards; their bigotry and superstition, their indolence, their temperance in eating and drinking, and their predilection for the amusement of bull-fighting are strong points of resemblance. There is a great difference of character, however, in different provinces. The inhabitants of the northern provinces are much more industrious than those in the south. The industry of the inhabitants of Entre Duero e Minho would not suffer on a comparison with those of the more northern countries of Europe, and accordingly they are possessed of opulence, and enjoy all the comforts and luxuries of life. Those of *Tras-os-Montes* are a hardy race, and industrious also, in spite of their

barren and mountainous regions. In Alentejo are more wandering beggars than in all the rest of the kingdom. The best mariners come from Algarve. The Portuguese generally are inferior in stature to the Spaniards. Their complexion is swarthy, approaching to an olive. They have, generally, graceful forms, regular features, and dark, brilliant, expressive eyes.

Language.] The Portuguese language strongly resembles the Spanish; both are derived chiefly from the Latin; but the latter is more remote from it and harsher to the ear than the former. They have both about the same proportion of Arabic words; but the Portuguese has borrowed none of the guttural sounds of that language, which are numerous in the Spanish.

Government.] The government is an hereditary monarchy. Portugal, like Spain, has its Cortes or representative body, consisting of the clergy, the high nobility and the commons, but they were not assembled after 1697, until the recent revolution, similar to that of Spain, restored them to their ancient powers. The kingdom is styled "The United kingdom of Portugal, Brazil and the two Algarves." In 1806, when Portugal was invaded by the French, the court and royal family removed to Rio Janeiro in Brazil, but they have now returned to Europe.

Religion.] The religion is the Roman Catholic, and was formerly maintained with much intolerance. The inquisition punished heretics with great severity, but it now acts only as an engine of civil police. A great number of monasteries, (above 400) are still kept up, and a large portion of the best land of the kingdom is the property of the church.

Revenue, Army, &c.] The revenue amounts to between £3,000,000 and £4,000,000, a considerable portion of which is derived from Brazil. The debt is small, not exceeding £12,000,000. The army contains 56,000 regular troops, of whom 24,000 are in Brazil. The navy consists of 9 ships of the line, 14 frigates and many smaller vessels, manned by 12,000 sailors.

Manufactures and Commerce.] Manufactures are in a very backward state, the establishments being on a small scale, and confined to a few of the large towns. The commerce of the kingdom is more considerable, but for a long time past both the import and export trade have been managed chiefly by foreign merchants, particularly British, settled at Lisbon and Oporto. The exports consist almost entirely of raw produce, viz. wine, salt, wool and fruits. Of wine the average annual value exported is nearly £2,000,000; of salt, fully £300,000; of wool, below £100,000. The imports are very various, viz. corn, flour, fish, woollens, linen, cotton goods, hard-ware and British manufactures of almost every kind. The whole value of the imports is about £3,000,000. The intercourse with Brazil, which was formerly restricted to Portuguese merchants, is now open to all nations.

ITALY.

Situation, and Extent.] Italy is a large peninsula surrounded on all sides by natural boundaries; the Alps separating it from France on the west, Switzerland on the north, and Germany on the north-east, while on all other sides it is washed by the Adriatic sea and the Mediterranean. It extends from $37^{\circ} 50'$ to $46^{\circ} 50'$ N. lat. and from 6° to 19° E. lon. Its greatest length from N. W. to S. E. is 700 miles. The area, including the islands of Sicily and Sardinia, is estimated at 117,090 square miles. The shape of the continental part resembles that of a boot.

Divisions.] Italy is at present divided into nine independent states as exhibited in the following table.

States.	Square miles.	Population.	Pop. on a sq. m.
1. Kingdom of Sardinia,	27,400	3,994,000	146
2. The Lombardo-Venetian } kingdom or Austrian Italy, }	18,290	4,014,000	219
3. Kingdom of the Two Sici- } lies or Naples and Sicily, }	43,600	6,618,000	152
4. States of the church,	14,500	2,346,000	162
5. Grand Duchy of Tuscany,	3,500	1,180,000	139
6. Duchy of Parma,	2,280	377,000	165
7. Duchy of Modena,	2,060	370,000	180
8. Duchy of Lucca,	420	138,000	328
9. Republic of San Marino,	40	7,000	175
Total,	117,090	19,044,000	162

Bays and Straits.] The *gulf of Venice* or *Adriatic sea* washes the whole eastern coast. The *gulf of Taranto* is a large bay on the southern coast of the kingdom of Naples. The part of the Mediterranean which washes the coast of the kingdom of Sardinia is called the *gulf of Genoa*, and the part included between the island of Corsica and the coast of Tuscany, the *Tuscan or Etrurian sea*. The *strait of Messina* is between the southern extremity of Italy and the island of Sicily; and the *strait of Bonifacio*, between the islands of Corsica and Sardinia.

Mountains.] The great mountain ranges of Italy are the Alps and the Apennines. The *Alps* commence on the coast of the Mediterranean, near the southern extremity of the kingdom of Sardinia, and after stretching far to the north and still farther to the east, take a southerly direction and terminate in Istria on the gulf of Venice, forming a vast semicircular barrier to Italy on the side of France, Switzerland and Germany. In different parts of its course, the range has different names. The part at the S. W. extremity, from the Mediterranean to Mont Viso, is called the

Maritime Alps; from Mont Viso to Mont Cenis it is called the *Cottian Alps*; and the part north of Mont Cenis for some distance is called the *Graian Alps*. The next divisions are the *Pennine*, *Lepontine*, and *Rhaetian Alps*, which lie principally in Switzerland; after which follow the *Noric*, *Carnic*, and *Julian Alps* on the side of Germany. The highest summit, and the highest mountain in Europe, is Mont Blanc, in the Pennine Alps, which reaches an elevation of 14,876 feet above the level of the sea. There are numerous summits in almost every part of the range which exceed 9,000 feet.

The *Apennines* may be considered as a continuation of the *Maritime Alps*. They leave that chain in lat. $44^{\circ} 12' N.$ and after running for a considerable distance to the east, turn gradually to the south, separate Tuscany from the States of the church, and after traversing the latter country and Naples in their whole extent, divide into two branches, one of which stretches along the eastern side of the gulf of Taranto, and terminates at Capo di Leuca, while the other proceeds on the west side of the same gulf, and terminates near the strait of Messina at the S. W. extremity of Calabria. The mountains in the island of Sicily are sometimes considered as a continuation of the Apennines.

Rivers.] The *Po*, the principal river in Italy, rises in Mont Viso, in the Cottian Alps, on the borders of France, and running in an easterly direction, passes through the kingdom of Sardinia, separates Austrian Italy or the Lombardo-Venetian kingdom from Parma, Modena, and the States of the church, and discharges itself through many mouths into the Adriatic, about 30 miles south of Venice, after a course of more than 500 miles. It is sufficiently deep to bear boats and barges at 30 miles from its source, but the navigation is at all seasons difficult, and not unfrequently hazarded on account of the rapidity of the current. Its waters are liable to sudden increase from the melting of the snows and from heavy falls of rain, the rivers that flow into it being almost all mountain streams; and in the flat country in the lower part of its course, great dikes are erected on both sides of the river to protect the lands from inundation. During its long course it receives a great number of tributaries, its channel being the final receptacle of almost every stream which rises on the eastern and southern declivities of the Alps, and the northern declivity of the Apennines. Its principal tributaries, beginning in the west, are, the *Dora Riparia*; the *Dora Baltea*; the *Stura*; the *Orco*; the *Sesia*; the *Tanaro*; the *Tesino*, which rises in mount St. Gothard in Switzerland, and after flowing through lake Maggiore forms the boundary between Sardinia and the Lombardo-Venetian kingdom; the *Otona*, which passes by Milan; the *Adda*, which also rises in Switzerland, and flowing at first in a westerly direction passes through the lake of Como, after which it turns to the south and joins the *Po* near Cremona; the *Oglio*, which rises on the borders of Switzerland and passes through lake Isco; the *Mincio*, which issues from the southern extremity of the lake of Garda, and after forming the lake and marshes that surround Mantua.

falls into the Po, eight miles below that city; the *Crostolo*, which rises in the dutchy of Parma, and joins the Po, a little above Guastalla; and the *Panaro*, which rises in the Apennines and pursuing a northerly course passes by the city of Modena, and falls into an arm of the Po.

The other large rivers in the north of Italy are, the *Adige*, which rises in the Alps, and passing by Trent and Verona discharges itself into the Adriatic a little north of the mouth of the Po; the *Brenta*, which rises in the Alps, 7 miles E. of Trent, passes by Padua, and discharges itself into the Adriatic a little S. of Venice; the *Piave*, and the *Tagliamento*.

In the centre and south of Italy there are no large streams, the narrowness of the peninsula and the central position of the Apennines, causing the rivers to flow directly into the sea after short courses. The most considerable are, the *Arno* which traverses the grand dutchy of Tuscany from east to west, passing by the city of Florence, and discharges itself into the Mediterranean 12 miles N. of Leghorn, and 4 below Pisa to which it is navigable for small vessels; and the *Tiber*, which rises in the Apennines on the borders of Tuscany, and flowing south into the States of the church, passes through the city of Rome, and falls into the Mediterranean.

Lakes.] The *Lago Maggiore*, which lies partly in Switzerland but principally in Italy is 27 miles long and on an average 3 broad. It contains the Borromean islands, which are the admiration of every traveller. The *lake of Como*, lying east of Lago Maggiore, is 36 miles long. The surrounding country is highly picturesque, being covered with vineyards, interspersed with beautiful villas, and skirted by lofty mountains. Still farther to the east is the small lake of *Iseo*, which is followed by the *lake of Garda*, an expanse of about 30 miles in length by 8 in breadth. All these lakes discharge their waters into the Po. In the central part of Italy the largest lakes are, the lake of *Perugia* in the S.E. part of Tuscany, the ancient *Thrasimenus*, remarkable for the victory gained by Hannibal over the Romans; and the *Bolsena*, in the States of the church.

Face of the Country.] Italy is surpassed by no country in the beauty and diversity of its natural scenery. Its mountains present every variety of form and elevation, of rugged rocks and precipices, thick and extensive forests, water-falls and all the component parts of picturesque beauty. The country between the Alps and Apennines consists principally of extensive plains, watered by the Po and its numerous branches. In the central and southern parts, the country on both sides of the mountains is sometimes a succession of hills and dales, and at others the vallies widen into plains of singular richness and beauty. The warmth of the climate, the richness of the soil, the frequency of the rains, the number of brooks and rivers, and the remarkable clearness of the atmosphere give a beauty to the Italian landscape which is not known in the rest of Europe.

The area, including the island of Sardinia, is estimated at 27,400 square miles.

Divisions.] The kingdom is composed of the following territories, several of which are again subdivided.

	Square miles.	Population.	Pop. on a sq. m.
1. Piedmont,	6,800	1,660,000	244
2. Savoy (not properly in Italy,) }	3,800	450,000	118
3. The cidevant republic of Genoa, }	2,300	532,000	231
4. Dutchy of Montferrat,	900	186,000	206
5. The county of Nice,	1,100	90,000	82
6. Part of the dutchy of Milan, }	3,300	536,000	163
7. Island of Sardinia,	9,200	520,000	56
Total,	27,400	3,994,000	146

Natural Features.] Sardinia is almost encircled, except towards the east, by lofty mountains; the Alps forming the western and northern boundaries, and in the N. W. separating Piedmont from Savoy, while the Apennines run along the southern border. As you proceed from these lofty ranges towards the interior, the surface presents a succession of mountains and hills, gradually diminishing in height till they terminate in the beautiful plains, which occupy the central and eastern portions of the kingdom and extend into Lombardy. The principal river is the Po, which rises on the western frontier and traverses the country in its whole breadth, receiving the numerous streams that descend on all sides from the mountains. The soil is very fertile, the plains yielding abundantly wheat, rye, barley, maize, and in the low grounds, rice, while the hills are covered with flourishing vineyards, and rich pastures. The mountains present one of the richest mineral districts in Europe. Savoy, which is separated from the rest of the kingdom by the loftiest part of the Alps, has a rugged and rocky surface and is naturally one of the poorest countries in Europe, but by dint of skill and industry, the inhabitants raise enough to supply their wants.

Chief Towns.] *Turin*, the capital, and one of the most regularly and beautiful cities in Italy, is situated in a broad plain on the Po near its confluence with the Doria. Its citadel is reputed one of the strongest in Europe. It has a university and 86,000 inhabitants.

Genoa stands on the declivity of a hill on the gulf of Genoa. On the land side it is surrounded by a double wall and is a place of great strength. The harbor is in the form of a semicircle, about a mile in diameter, and is deep enough for ships of 80 guns, but the entrance is difficult. When viewed from the harbor, Genoa and its environs present the form of an amphitheatre. The white buildings, erected on successive terraces, form a contrast

with the naked appearance of the Apennines and give the town an air of great magnificence, but the interior does not altogether correspond to these impressions. Genoa exports rice, fruit, and olive oil, also her own manufactures, viz. silks, damasks and velvets. The chief business is carried on under foreign flags, from a dread of the Barbary corsairs. The population is 76,000.

Alessandria is a strong town on the right bank of the Tanaro, 44 miles E. of Turin. It has fairs in April and October, which are attended by merchants from all parts of Italy, and even from France and Switzerland. The population is 35,000. The village of *Marengo*, celebrated for the battle between the French and Austrians on the 14th of June 1800, is 5 miles S. E. of *Alessandria*.

Nice is delightfully situated on the Mediterranean at the foot of an amphitheatre of hills, and is much resorted to by invalids on account of the salubrity of the climate. The harbor is spacious and the trade considerable. Population 18,500. *Chamberry*, the capital of Savoy, is situated on a branch of the Rhone, near the French border, and contains 12,000 inhabitants.

Government, Revenue, &c.] The government is an unlimited monarchy. Some of the territories, however, possess privileges which were guaranteed to them when they were incorporated with the rest of the kingdom. This is particularly the case with Genoa, which was added by the Congress of Vienna in 1815, and which is still governed by its own laws, and preserves its senate, its supreme court of justice, and provincial councils, whose assent is necessary to the imposition of new taxes. The revenue is about £1,500,000. The standing army, amounting to nearly 60,000 men, is larger in proportion to the population and resources than that of almost any state in Europe.

ISLAND OF SARDINIA.] The island of Sardinia is situated to the south of Corsica, from which it is separated by the strait of Bonifacio. It extends from $38^{\circ} 55'$ to $41^{\circ} 17'$ N. lat. and from 8° to 10° W. lon. It contains 9,200 square miles and 520,000 inhabitants. The surface presents a pleasant variety of hill and dale, and a chain of mountains runs through the island from north to south. The soil is generally fertile, producing wheat, vines, olives and other fruit in abundance. The climate is healthy wherever the land is elevated, but unhealthy in the vallies and low grounds, where the marsh vapors generate disease. The lower classes of people live in extreme ignorance and poverty, and are constantly oppressed by the barons. The interior of the island exhibits a degree of barbarism which can with difficulty be believed to exist in Europe. The shepherds are dressed in the skins of goats and sheep, and roam with their flocks over the uninhabited tracts. They go constantly armed to protect themselves from the banditti in the mountains. *Cagliari*, the capital, and residence of the viceroy, is in the southern part of the island, on a gulf of the same name, and has a spacious and secure harbor. The inhabitants, who are about 30,000 in number, carry on considerable trade in oil, wine, and especially salt.

2. LOMBARDO-VENETIAN KINGDOM.

The Lombardo-Venetian kingdom forms part of the Austrian empire, and will be more properly described under that head.

3. KINGDOM OF THE TWO SICILIES.

Situation and Extent.] The continental part of the kingdom of the two Sicilies is called the kingdom of Naples. It occupies the southern part of the peninsula of Italy, and is bounded N. W. by the States of the church, and on all other sides by the Adriatic and Mediterranean: from Sicily it is separated by the strait of Messina, which in the narrowest part is not more than two miles broad. It extends from 13° to 19° E. lon. and from 37° 50' to 42° 55' N. lat. The area of the whole kingdom is estimated at 43,600 square miles, of which Naples contains 31,000 and Sicily 12,600.

Divisions.] The kingdom of Naples is divided into the following provinces.

Provinces.	Population	Provinces.	Population.
1. Naples,	752,000	9. Molise,	207,000
2. Terra di Lavoro,	519,500	10. Terra di Bari,	331,000
3. Principato Citra,	444,300	11. Terra d' Otranto,	292,000
4. Principato Ultra,	357,000	12. Basilicata,	378,000
5. Abruzzo Ultra, I.	157,000	13. Calabria Citra,	341,000
6. Abruzzo Ultra, II.	223,000	14. Calabria Ultra, I. }	419,000
7. Abruzzo Citra,	232,500	15. Calabria Ultra, II. }	
7. Capitanata,	255,000		

Face of the Country, &c.] The Apennines pass through the whole extent of the kingdom, from N. W. to S. E. and in Abruzzo there are several summits more than 8,000 feet high. Below the mountains there are many fertile hills, and extensive plains and vallies, which under the influence of an invariably mild climate present a remarkable luxuriance of vegetation. Marshes are found on various parts of the sea-coast and by their insalubrity render some of the most fertile districts uninhabitable. The soil is in general very fertile, producing corn, tobacco, vines, olives, &c. in abundance, but owing to the indolence of the people agriculture is much neglected. In many parts the grain is still separated from the straw by the trampling of cattle.

Volcanoes.] This kingdom is exposed to volcanoes and to earthquakes, which have sometimes buried whole cities in their ruins. The most celebrated volcano is Vesuvius, a solitary mountain 6 miles E. of Naples. It rises to the height of 3,600 feet above the sea, and has been liable to frequent eruptions. The first on record is that of the year 79, when Pompeii and Herculaneum were destroyed.

laneum were completely buried by the lava. A very destructive eruption occurred also in 1794, which almost buried a town in the neighborhood, and totally destroyed 5,000 acres of rich vineyards.

Chief Towns.] *Naples*, the capital of the kingdom, and the fourth city in Europe in point of population, is delightfully situated on the margin of a spacious bay, 12 miles in diameter, the shores of which rise gradually from the water, and are covered with villas and gardens, with mulberry, orange and olive groves, and with many extensive vineyards and flourishing villages. The view of the bay and surrounding country from the castle of St. Elmo, on the west of the town, is celebrated as one of the finest in Europe. The city is surrounded by a wall, but is not strongly fortified. The streets, though in general narrow, are straight, and handsomely paved with lava. The Strada di Toledo, extending half the length of the city, is one of the finest streets in Europe, being broad, straight, well paved and bordered in its whole length with elegant buildings. The principal manufactures of Naples are silk fabrics. The trade, though great for so inactive a country as the south of Italy, is small when compared with that of the crowded sea ports of England, and Holland. All classes of the inhabitants, are noted for their indolence. Naples literally swarms with nobility without fortunes, priests without benefices, and beggars of all descriptions. The Lazzaroni are a part of the populace without either dwellings or regular occupation. They may be said to spend their life in the streets, sauntering about during the day, and sleeping at night under a public portico, or on the steps of a church. Their number was formerly between 30,000 and 40,000 and is still considerable. The environs of Naples are highly interesting to the antiquary and classical scholar. Vesuvius, the baths of Nero, the tomb of Virgil, and the ruins of Herculaneum and Pompeii are all in its vicinity. The population is 330,000.

Taranto, on a peninsula at the head of the gulf of Taranto, contains 18,500 inhabitants. *Bari*, capital of the province of the same name, is on the Adriatic, and contains 18,000 inhabitants. *Salerno* is on the gulf of the same name, 28 miles S. E. of Naples, and has 10,000 inhabitants. *Reggio*, in Calabria Ultra, nearly opposite Messina in Sicily, has 16,000 inhabitants.

Population Government, &c.] The population of the whole kingdom is 6,618,000, of whom 4,963,000 are in Naples, and 1,655,000 in Sicily. The government is an hereditary monarchy, and the power of the king is limited by a parliament in which the clergy, the nobility, the land-holders, the universities and the merchants are represented. Sicily is governed by a viceroy and has its separate parliament. The revenue is about 12,000,000 dollars, and of this sum Sicily yields about \$4,000,000. The army contains 50,000 troops, including 10,000 furnished by Sicily. The navy is inconsiderable and consists almost entirely of small vessels.

Manufactures and Commerce.] Manufactures are in a very backward state, many articles being imported from foreign countries. The commerce is principally carried on by foreigners, particularly the British. The exports consist entirely of raw produce, such as oil, silk, wool, and fruit.

Curiosities.] The most remarkable curiosities are the ruins of Pompeii and Herculaneum. *Pompeii* is an ancient city 14 miles from Naples, at the foot of Mount Vesuvius, which was buried by an eruption of the volcano in the year 79, from which time it had been forgotten almost to its name, until discovered about the middle of the last century. The volcanic matter covering Pompeii being a little more than an accumulation of ashes, about a fourth part of the city has been cleared, and several temples and columns and numerous ancient buildings have been discovered in a state of perfect preservation. *Herculaneum*, which was buried at the same time with Pompeii, is 5 miles E. by S. of Naples. Several streets have been cleared, and are found to be paved and flagged on the sides. Many bronze statues have been found, likewise paintings, many of them in high preservation, various ornaments of dress, kitchen utensils, household furniture, surgical instruments, and other implements of all kinds. The whole is calculated to convey a complete idea of the manners of the age, and to correct a number of erroneous ideas of the arts and habits of the ancients. The most valuable remains, however, are the manuscripts. These are all calcined, and a number of them sunk into dust when exposed to the air. About 1700, however, have been preserved, and there is reason to expect that many more may still be found, and among them, perhaps some of the missing classics. It appears that the inhabitants of this city had time to escape when it was destroyed, as very few skeletons are found, while at Pompeii the number of skeletons is very considerable.

ISLAND OF SICILY. Situation and Divisions.] Sicily, the largest island in the Mediterranean, is of a triangular shape, and lies between lat. $36^{\circ} 40'$ and $38^{\circ} 12' N.$ and between $12^{\circ} 42'$ and $16^{\circ} E.$ lon. It is separated from the continent by the narrow strait of Messina, on the opposite sides of which are the rocks of Scilla and the whirlpool of Charybdis, so celebrated by the ancients: the latter is on the Sicilian coast, and the former in Calabria. The area of the island is estimated at 12,600 square miles, and the population at 1,655,000. Sicily was formerly divided into three parts, viz. the Val di Mazzara, Val di Demone, and Val di Noto; but in 1815 it was divided into 7 intendancies, which derive their names from their principal towns, viz. Palermo, Messina, Catania, Girgenti, Syracuse, Trapani and Calatanissetta.

Face of the Country, Soil, &c.] A chain of mountains proceeds through the island from east to west, and throws off branches towards the south. Between the ridges are beautiful vallies, and along the coasts are extensive plains. The soil has long been noted for its fertility, Sicily having been anciently styled the

granary of the Roman empire; the lands at present, however, are almost entirely in the hands of the barons and clergy, and tracts of many miles in extent are left uncultivated. The productions are corn, vines, olives, silk, flax, hemp and fruits of various kinds.

Volcano.] *Etna*, celebrated from the most remote antiquity for its volcanic eruptions, is a single mountain on the eastern coast of the island, 180 miles in circumference at its base, and rising by a gradual ascent to the height of 10,954 feet above the level of the sea. Over its sides are scattered 77 cities, towns and villages. From Catania, which stands at the foot, to the summit is 30 miles, and the traveller passes through three distinct zones, called the cultivated, the woody, and the desert. The lowest, or *cultivated* zone, extends through an interval of ascent of 16 miles, and it contains numerous small mountains of a conical form, about 300 or 400 feet high, each having a crater at the top from which the lava flows over the surrounding country. The fertility of this region is wonderful and its fruits are the finest in the island. The *woody* region forms a zone of the brightest green all round the mountain, and reaches up the side about 8 miles. In the *desert* region vegetation entirely disappears, and the surface presents a dreary expanse of snow and ice. The summit of the mountain consists of a conical hill, containing a crater above two miles in circumference. The approach of an eruption is indicated long beforehand by the emission of a pale smoke from the crater; this is followed, after some time, by clouds of black smoke which progressively increase in volume. After the lapse of weeks, perhaps of months, the lava begins to boil over the top of the crater, or to burst from some part of its sides; the interior commotion now ceases, and the lava flows slowly down the side of the mountain. It is pressed forward by the fresh liquid continually issuing from the mountain, and burns up every thing before it, but the inhabitants have at times diverted or absorbed it by digging canals. The whole number of eruptions on record is 31, of which not more than 10 have issued from the highest crater. The last was in 1809.

Chief Towns.] *Palermo*, the capital of the island, is a large and beautiful city, in an extensive plain on the western shore of a bay on the N. coast of the island, in lon. 13° 20' E. The commerce is extensive and it has important silk manufactories. The harbor is deep and spacious, but dangerously open to the swell of the sea. The population is estimated at 130,000.

Messina is beautifully situated on the strait of the same name, which is here only three miles wide. The harbor is one of the finest in the Mediterranean; it consists of a bay which has the city along its west shore and on the east a long tongue of land, the point of which turns inward, leaving the entrance only a quarter of a mile wide. The circumference of the harbor is 5 miles and the depth in most places not less than 40 fathoms. It is defended by a strong citadel situated on the projecting tongue of land. The commerce of the town is exten-

ive, particularly in wine and silks, which are manufactured here in large quantities. The population is 36,000.

Catania is a famous city on the east coast of the island, at the foot of Mount Etna. It has been three times destroyed by the lava of the volcano, but has always risen more splendidly from its ashes; and has a title to rank among the elegant cities of Europe. The harbor is large and the trade of the town considerable, particularly in silks, which are extensively manufactured here. Population 50,000.

Syracuse, on the coast, about 35 miles S. S. E. of Catania, was once the metropolis of all Sicily and one of the most famous cities in the world for the stateliness of its buildings, and the immense wealth of its inhabitants. It is particularly celebrated for its defence, by the wonderful genius of Archimedes, against the the combined fleet and army of the Romans. It has a noble harbor, and the population at present is 17,000.

Lipari Islands.] These islands, 12 in number, lie off the north coast of Sicily, between $13^{\circ} 15'$ and $15^{\circ} 39'$ E. lon. and between $38^{\circ} 20'$ and $38^{\circ} 50'$ N. lat. The largest of the group is Lipari, which contains 100 square miles. The whole group bears evident marks of a volcanic origin; and in several of the islands the subterraneous fires are still in a state of activity. The most considerable of these are found in the islands of Volcano and Stromboli. The latter is the only volcano known whose eruptions are continued and uninterrupted. Of the 12 islands four only are inhabited and their population is about 20,000. The principal exports are alum, sulphur, nitre and other volcanic products, such as pumice stone, with which they supply a great part of Europe.

Aegadian Islands.] These lie at the western end of Sicily, near Trapani. They are three in number, Lavenzo, Maretano, and Favignano. The population of the whole is 12,000.

4. STATES OF THE CHURCH.

Situation and Extent.] This country, forming the temporal dominions of the pope, is a narrow crooked territory, bounded N. by the Po, which separates it from the Austrian dominions; E. by the Adriatic; S. E. by the kingdom of Naples; S. W. by the Mediterranean; and W. by Tuscany and Modena. It extends from $10^{\circ} 56'$ to 14° E. lon. and from $41^{\circ} 19'$ to 45° N. lat. The area is estimated at 14,500 square miles, and the population according to a census taken in 1815 was 2,345,719.

Divisions.] This territory, is divided into 18 delegations, which derive their names from their principal towns. 1. Rome and its circuit. 2. Frosinone. 3. Rieti. 4. Viterbo. 5. Civita Vechia. 6. Perugia. 7. Spoleto. 8. Camerino. 9. Macerata. 10. Fermo. 11. Ascoli. 12. Ancona. 13. Urbino and Pesara. 14. Forli. 15. Ravenna. 16. Bologna. 17. Ferrara. 18. Benevento.

Natural Features.] The papal territory is traversed from N. W. to S. E. by the Apennines, which serve to moderate the violent heats of summer and give rise to a number of streams, the only one of which possessed of any interest is the Tiber. On the coast of the Mediterranean, between the mouth of the Tiber and the Neapolitan frontier are the Pontine marshes, which corrupt the atmosphere for many miles around. Many attempts have been made to drain these marshes, first by the Roman emperors and at a later period by the popes, but hitherto without complete success. The soil here is naturally rich, but not a twentieth part is in any tolerable state of cultivation, and the country appears rather like a desert than the abode of civilized men. The rest of the territory is generally fertile and produces corn, wine, fruits, &c.

Chief Towns.] *Rome*, the residence of the pope, and formerly the seat of the Roman empire, and the capital of the world, is built chiefly on the left or eastern bank of the Tiber, 15 miles from its mouth. The space inclosed by the walls approaches to the form of a square, and is about 13 miles in circuit, but two thirds of this space is now covered with vineyards, corn fields or villas. The city abounds with splendid monuments of its ancient magnificence, such as columns, temples, amphitheatres, aqueducts, baths, statues, triumphal arches, &c. Among the ancient edifices is the Pantheon, a structure distinguished equally for solidity and elegance. A still more imposing object is the amphitheatre of Vespasian, which is the largest amphitheatre ever erected, being of an oval form, 531 feet long and 481 broad. Trajan's pillar still stands on the spot where it was erected by that emperor, and is still covered with the admirable bas reliefs, representing his expedition against the Dacians. It is of marble, 133 feet high; 11 feet in diameter at the base and 10 at the top. No city in Europe is superior to modern Rome in the number and magnificence of its churches. The principal is that of St. Peter's, in which the arts of architecture, sculpture and painting, are all displayed in the highest perfection. It was commenced in 1506, and no less than 18 successive popes were employed in its construction. The most celebrated architects of modern times, Bramante, Raphael, Michael Angelo and others have displayed their talents on this vast undertaking, the total expense of which must have amounted to at least £12,000,000 sterling. Entering a circular court formed by a vast colonnade, the spectator is struck by the majestic front of the building, extending 400 feet in length and rising to the height of 180. The eye is at the same time gratified with the majestic dome, rising from the central part of the roof of the church, to the height of 424 feet, reckoning from the ground. The interior of the church corresponds perfectly with its outward grandeur. The Vatican is a palace belonging to the pope, and forming not one but an assemblage of edifices. Its extent is immense, and the number of its rooms is estimated at 10,000. The library of the Vatican is said to contain 500,000

volumes, and is the largest in the world. Rome has long been a resort for painters, sculptors, and architects from various countries. The population in 1817 was 131,000.

Bologna, the second city in size and opulence, is situated at the foot of the Apennines, between two small rivers, in lat. $44^{\circ} 30'$ N. and lon. $11^{\circ} 21'$ E. The churches are of ingenious and costly architecture and adorned in the interior with beautiful paintings. Here is a famous university, frequented by foreigners from various parts of Europe. The manufactures are of considerable importance, particularly those of silk. Population, 63,000. *Civita Vecchia* is a sea-port on a bay of the Mediterranean, 38 miles N. W. of Rome. Population 9,000. *Ancona* is a celebrated trading town on the gulf of Venice. It is situated on a projecting point of land, is well fortified and has a fine harbor. Population 20,000.

Government, Revenue, &c.] The pope is invested with absolute power, both spiritual and temporal. The candidates for the papacy must be members of the college of cardinals, to which body belongs the election of the pope. Their number is nominally 70, but is seldom complete. All the cities in the papal territory are governed by prelates appointed by the pope. The revenue is about £600,000. The army does not contain more than 4,000 men.

5. GRAND DUTCHY OF TUSCANY.

Situation, Extent and Divisions.] Tuscany is bounded N. by Modena and the States of the church; E. and S. E. by the States of the church; W. by the Mediterranean, and N. W. by Lucca. It extends from $42^{\circ} 15'$ to $44^{\circ} 12'$ N. lat. and from 10° to $12^{\circ} 30'$ E. lon. Besides the country included in these boundaries there are several small detached territories. The area of the whole is estimated at 8,500 square miles, and the population at 1,180,000. The grand dutchy is divided into three districts, which derive their names from three of the principal towns, viz. Florence, Pisa, and Siena.

Natural Features.] The Apennines run along the northern and eastern frontier, separating the grand dutchy from the States of the church. The country below the mountains is agreeably diversified with fruitful hills, vallies and plains watered by numerous streams, the principal of which is the Arno. The climate is healthy except along the coasts where the exhalations from the swamps corrupt the air.

Chief Towns.] Florence, the capital of Tuscany and one of the finest cities in Italy, stands on both sides of the Arno, in a beautiful valley at the foot of the Apennines. Its streets and squares are adorned with pillars, fountains and statues. But the grand collection of works of art is in the Medicean gallery, known throughout Europe as the gallery of Florence. It is more than

500 feet long, and replenished with busts, statues and paintings. Here is the celebrated Venus de Medicis, and other beautiful specimens of art, carried off for a time by the French, but restored in 1815. Population 75,000.

Leghorn, situated in a marshy district on the coast, 12 miles S. of the mouth of the Arno, has more commerce than any other city in Italy. It is the residence of consuls from all the principal states in Europe and is annually visited by upwards of 4,000 vessels. It supplies the interior of Italy with the produce of the rest of Europe, of Levant and of the colonies. Among the exports are straw hats which are celebrated for their fineness. The harbor is shallow and difficult to enter. The population in 1819 was 50,000, of whom 8000 were Jews.

Pisa stands on both sides of the Arno, 4 miles from its mouth. It is celebrated for its university which was long a distinguished nursery of literature, and is still one of the principal seats of education in Tuscany. It has 40 professors. The population is 17,000. *Siena*, situated in a pleasant and healthy district 30 miles S. by E. of Florence, has little trade, but reckons among its inhabitants an uncommon number of gentry and literati. Population 24,000.

Government, &c.] The grand duke is an unlimited monarch. The revenue is stated at 3,000,000 dollars. The army contains about 2,500 men.

Island.] *Elba* is a small island lying off the coast of Tuscany and separated from it by the channel of Piombino. It contains 150 square miles and 14,000 inhabitants. Its general aspect is mountainous, and it produces wines, fruits and iron ore, all of which are exported. It is chiefly celebrated, however, as the residence of Bonaparte from May 1814 to 26th Feb. 1815, when he sailed on his fatal expedition to France.

6. DUTCHY OF PARMA.

The dutchy of Parma is bounded N. by the Lombardo-Venetian kingdom; E. by Modena; S. by a detached portion of Tuscany, and W. by Sardinia. It is divided into four districts, viz. Parma, Piacenza, Borgo San Domino and Guastalla. It contains 2,280 square miles and 377,000 inhabitants. The southern part of the territory is traversed by several branches of the Apennines, but the northern part consists of extensive plains. The principal river is the Po, which runs along the northern border and here receives the Taro, the Trebia and a number of smaller streams, all of which rise in the Apennines and traverse the dutchy from south to north. The soil is fertile and well cultivated. The power of the sovereign is not limited by any representative assembly. By the treaty of Paris in 1814 this dutchy was given to the ex-empress Maria Louisa, the wife of Napoleon

Bonaparte, and on her death it will devolve to Spain. The revenue is £160,000.

Chief Towns.] *Parma*, the capital, is on a small river of the same name. It has 30,000 inhabitants, and a university with about 400 students. *Piacenza* or *Placentia* is near the Po, not far from the spot where it is joined by the *Trebia*. It has 20,000 inhabitants. *Guastalla*, situated on the Po at the confluence of the *Crostollo*, 21 miles N. E. of *Parma*, has 5,500 inhabitants.

7. DUTCHY OF MODENA.

The dutchy of *Modena* is bounded N. by the *Lombarardo-Venetian* kingdom from which it is separated by the river *Po*; E. by the States of the church; S. E. by *Tuscany* and *Lucca*; S. W. by the *Mediterranean*; and W. by *Parma*. The area is estimated at 2,069 square miles, and the population at 370,000. It consists of eight districts, viz. *Modena*, *Reggio*, *Mirandola*, *Correggio*, *Carpi*, *Novellara*, *Massa* and *Carrara*. The southern part of the territory is intersected by the *Apennines*; the northern part has a gently undulating surface with a fertile soil, and is watered by the *Crostolo*, the *Panaro*, and the *Secchia*. This dutchy is possessed in full sovereignty by a lateral branch of the house of *Austria*, the archduke *Francis* of *Este*. The revenue is computed at £140,000 sterling; the army at 1,500 men.

Chief Towns.] *Modena*, the capital, is in a delightful plain between the rivers *Panaro* and *Secchia*, and contains 20,000 inhabitants. *Reggio*, 12 miles west of *Modena*, has 13,300 inhabitants. *Massa*, situated 2 miles from the coast of the *Mediterranean*, has 10,000 inhabitants. *Carrara*, celebrated for its beautiful marble, is 5 miles N. W. of *Massa*. *Mirandola*, 16 miles N. E. of *Modena*, is a regularly fortified town and contains 8,200 inhabitants.

8. DUTCHY OF LUCCA.

The dutchy of *Lucca* is bounded N. by *Modena*; E. and S. by *Tuscany*; and W. by the *Mediterranean*. It contains 420 square miles and 138,000 inhabitants. The territory is traversed by the *Apennines*, and two thirds of its surface are supposed to be covered by mountains and defiles; the remainder comprises the delightful plain around the city, and a number of fertile vallies. From the middle of the 15th century till 1805 it was an independent republic. In 1805 its government was changed by the French, and in 1815 it was erected by the Congress of *Vienna* into a dutchy and given to the infant of *Spain*, *Maria Louisa*. *Lucca*, the capital, is situated in a fertile plain on the *Serchio*, and has a university and 18,000 inhabitants.

9. REPUBLIC OF SAN MARINO.

This small republic is in lat. $42^{\circ} 56' N.$ lon. $12^{\circ} 24' E.$ and is entirely surrounded by the papal dominions. Its territory consists only of a mountain 2,000 feet in height, with a small tract lying along its base; the area of the whole does not exceed 40 square miles. The population is 7,000. It is governed by its own laws, but is under the protection of the pope. This petty state boasts an existence of many centuries.

MALTA.

Malta is an island in the Mediterranean lying 50 miles S. from the coast of Sicily. It belongs to the British, together with the two small islands of Gozzo and Cerrino, which are separated from it only by a narrow channel. The area of the three islands is 170 square miles, and the number of inhabitants 90,000, of whom above 75,000 are in Malta, which is thus one of the most populous spots on the globe. The soil is formed of a reddish loamy mould, lying on a basis of rock and seldom exceeding 12 or 15 inches in depth. Every spot is cultivated with the greatest care; and soil, when deficient, is supplied in ship loads from Sicily. The fields are surrounded with small inclosures of stone to prevent the earth being washed away by the rains. From 1530 to 1798 Malta was in possession of the knights of St. John of Jerusalem, who highly distinguished themselves on many occasions by their valiant resistance to the Turks. In 1798 the island fell into the hands of the French and soon after was taken by the British, and was confirmed to them by the treaty of Paris in 1814. The island is very strongly fortified. In no fortress in Europe are the defences more imposing. In Gibraltar admiration is excited by the work of nature; in Malta, by the work of art. *Valetta*, the capital of the island, is situated on a peninsula which projects into the sea, and contains 32,000 inhabitants, an unusual proportion of whom are foreigners from many different countries. *Valetta* has two harbors, one on each side of the promontory on which the town is situated.

IONIAN ISLANDS.

The Ionian islands, sometimes called the Republic of the Seven islands, is a small and recently constituted republic, consisting of seven principal islands, and a number of islets extending along the S. W. coast of Turkey from 36° to $40^{\circ} N.$ lat. and from $19^{\circ} 20'$ to $23^{\circ} 10' E.$ lon. The seven principal islands are Corfu

Cephalonia, Zante, Santa Maura, Theaki or Ithaca, Cerigo and Paxo. The coasts of these islands are rugged and difficult of access, and their harbors insecure, with the exception of those of Theaki and Cephalonia, to which, in consequence, most of the shipping belongs. The surface is generally uneven, and contains a number of barren rocks and hills, interspersed, however, with fertile plains and vallies. The productions are corn, vines, olives, currants, cotton, honey, wax, &c. Vines and olives form the chief source of income to the inhabitants. These islands within a few years have repeatedly changed masters, having been sometimes in the hands of the French, sometimes of the English, and sometimes under the protection of Russia and Turkey. In the arrangements made at the Congress of Vienna in 1815, it was agreed that the republic should be put under the protection of Great Britain. A constitution for this small state was soon after drawn up and ratified by the British government in July 1817. It vests the legislative power in a senate of 29 representatives from the different islands, as mentioned in the following table.

	Square miles.	Population.	Pop. on a sq. m.	Representatives.
Corfu,	220	60,000	272	7
Cephalonia,	352	60,000	170	8
Zante,	88	40,000	454	7
Santa Maura,	130	20,000	154	4
Cerigo,	100	10,000	100	1
Theaki,	66	8,000	121	1
Paxo,	38	8,000	242	1
Total,	987	206,000	208	29

The inhabitants are partly Italians, but principally Greeks. The Greek religion and Greek language are also most prevalent. The principal occupations are navigation, commerce and agriculture.

AUSTRIAN EMPIRE.

Situation and Extent.] The Austrian empire is comparatively of modern origin, and at different periods has received various important augmentations. It embraces about one third of Germany, nearly a quarter of Italy, a portion of ancient Poland, the whole kingdom of Hungary, and several smaller states, and is thus inhabited by nations varying in their origin, language, religion and modes of life, yet forming at the present day a firm and compact body politic. It is bounded N. by Saxony, Prussia,

the free city of Cracow, and the Russian empire; E. by Russia and Turkey; S. by Turkey, the Adriatic sea, and the river Po, (which separates it from the States of the church, Modena and Parma;) W. by the kingdom of Sardinia, (from which it is separated by the river Tesino and Lago Maggiore) Switzerland and Bavaria. It extends from 42° 21' to 51° N. lat. and from 8° 30' to 26° 41' E. lon. The area is estimated at 267,674 square miles.

Divisions.] The following table exhibits the size and population of the component parts of this great monarchy.

Countries.	Square miles.	Population.	Pop. on a sq. m.
I. German States,	80,894	9,482,000	117
1. Lower Austria or the } Archduchy of Austria, }	15,834	1,850,000	121
2. Inner Austria or Stiria,	8,800	795,000	90
3. The Kingdom of Illyria,	13,506	1,170,000	87
4. Upper Austria or the Tyrol,	11,448	747,000	65
5. Bohemia,	20,900	3,200,000	153
6. Moravia,	9,084	1,374,000	151
7. Austrian Silesia,	1,822	346,000	190
II. Austrian Poland or the } Kingdom of Galicia, }	33,638	3,778,000	112
III. The Hungarian States,	134,398	10,698,000	79
1. The kingdom of Hungary	88,660	7,515,000	85
2. Slavonia,	6,776	528,000	78
3. Croatia,	8,272	650,000	78
4. Dalmatia,	6,050	305,000	50
5. Transylvania,	24,640	1,700,000	69
IV. Austrian Italy,	18,290	4,014,000	219
1. The government of Milan,	8,340	2,082,000	248
2. The government of Venice,	9,950	1,932,000	194
Total,	267,674	27,972,000	105

Mountains.] The *Carpathian* mountains separate Hungary from Galicia, and Transylvania from Turkey. Branches proceed from the main range and encircle Transylvania on all sides as with a huge wall, through which there are 14 narrow passes, opening communications with the neighboring country. The highest summit in the range is the *Loimnitz*, 8,316 feet high. The *Sudetic* chain separates Moravia and Bohemia from Silesia and Saxony. The part between Silesia and Bohemia is called also the *Riesengebirge* mountains, and the part between Bohemia and Saxony the *Erzgebirge* or *Metallic* mountains. The *Bohmerwald*, or Bohemian Forest, is a chain of mountains separating Bohemia from Bavaria. The *Alps* proceeding in numerous branches from Switzerland, form the boundary between Germany and Italy, and under the names of *Noric*, *Carnic* and *Julian Alps*, overspread

all the German provinces south of the Danube, viz. Lower Austria, Stiria, Tyrol, and the kingdom of Illyria. Some of these branches proceed for a short distance into Hungary, and gradually sink away into plains, while others run in a N. E. direction and connect the Alps with the Carpathian mountains, the Sudetic chain and the Bohmerwald. The highest summits of the Alps in the Austrian empire, are the Orteles in the Tyrol, 14,466 feet high, and the Great-Glockner on the borders of the Tyrol and the kingdom of Illyria, 12,978 feet.

Face of the Country.] A large portion of the surface of the Austrian empire is covered with mountains. The most mountainous districts are the Tyrol and the other German provinces south of the Danube. Croatia, Slavonia, and Dalmatia are also traversed by mountain ranges. Bohemia and Transylvania are completely encircled by great chains of mountains, while in the interior they are traversed by inferior ridges. Moravia has mountain barriers on the west, north and east, but is open towards the south. In the other provinces there are several very extensive plains. The principal of these is the great plain of Hungary which occupies all the central and southern portions of that country, and even extends over the Danube into Turkey. The plains of Galicia commence at the foot of the Carpathian mountains, and form a part of that immense level tract which terminates only on the Baltic, the White sea, and at the foot of the Ural mountains. Austrian Italy is another vast plain watered by the Po, and its branches.

Rivers.] The principal river is the *Danube*, which comes from Bavaria and runs from west to east through the province of Lower Austria into Hungary, where it turns to the south and then to the S. E. and becomes for a short distance the boundary between Hungary and Turkey, after which its course lies wholly in Turkey. The principal tributaries which it receives in the Austrian dominions are, the *Traun*; the *Ens*; the *March* or *Morava*, which brings with it the tributary waters of nearly the whole of Moravia; the *Raab*; the *Waag*; and the *Theiss*, the largest river in Hungary, which rises in the Carpathian mountains on the borders of Galicia and Transylvania, and pursuing a circuitous course through the northern and central portions of the kingdom, joins the Danube 19 miles N. W. of Belgrade on the Turkish frontier, after a course of 450 miles.

The other considerable rivers are, 1. The *Elbe*, which rises in Bohemia, in the Riesengebirge mountains, and after receiving the *Iser*, the *Moldau*, and the *Eger*, which bring with them the waters of the whole valley of Bohemia, pierces through an opening in the mountains on the northern boundary and passes into Saxony. 2. The *Vistula*, which rises in Austrian Silesia, in the Carpathian mountains, and after passing by the free city of Cracow, flows through Galicia into the new kingdom of Poland. 3. The *Dniester* which rises in the Carpathian mountains, in Galicia, and after traversing a great part of that province passes into Russia. 4. The *Po*, which forms the southern boundary of Aus-

trian Italy. 5. The *Adige*, the *Brenta*, the *Piave* and the *Tagliamento*, which discharge themselves into the gulf of Venice north of the Po.

Lakes.] The principal lakes are, the *Neusiedler See*, in the west of Hungary near the German frontier, 30 miles long and 10 broad; the *Balaton* or *Platten See*, 40 miles long and 3 or 4 broad, lying about 70 miles S. E. of the *Neusiedler See*; lake *Garda*, lake *Iseo*, the lake of *Como* and the *Lago Maggiore*, all of which are in Italy.

Climate.] In the Italian provinces, in Slavonia, Croatia, and the level tracts in Hungary the climate is very mild, but in the southern part of Hungary and in Slavonia it is unhealthy on account of the morasses. In the mountainous districts the air is much colder, and the winter earlier and longer than in the low country, yet the vallies between the mountain ranges frequently have a warm climate. The climate of Galicia is colder than that of other parts of the empire in the same latitude.

Soil and Productions.] Notwithstanding the mountainous surface, the soil is on the whole very fertile. The most fertile tracts are the plains of Lombardy, Hungary and Galicia. Few countries on the globe can compare with the Austrian empire in the variety, richness and abundance of its natural products. In Lombardy and the southern part of Hungary are found the olive-tree, rice and most of the southern fruits; corn and wine are abundant in the southern parts of Hungary, in Transylvania, and all the German and Hungarian states below lat. 49°; flax, and grain of various kinds flourish luxuriantly in Galicia. No country except France produces wines in such plenty and variety and of so fine a quality. The Hungarian wines, particularly those of Tokay are very celebrated. The mountains afford all the metals except platina in great quantities and of an excellent quality. Wood is abundant, particularly on the Carpathian mountains, which are covered with an almost uninterrupted forest. Fish abound in the rivers, particularly in the Theiss, which excels in this respect every other river in Europe.

Agriculture.] The state of agriculture is very different in different provinces. The plains of Hungary and Galicia are finely adapted for the production of corn, but agriculture is so imperfectly understood here that the quantity raised is but little more than sufficient for the supply of the country. Hungary abounds with excellent pasture lands, but they are altogether the work of nature; the inclosure, the draining and the irrigation of meadows being all unknown. In Austrian Italy, on the other hand, agriculture is carried to the highest perfection.

Minerals.] The Austrian empire is very rich in mineral productions. Hungary and Transylvania excel in this respect every other part of Europe, particularly in the amount of gold. Silver, copper and lead are also abundant in these countries; iron, in Styria; tin, in Bohemia; quicksilver, at Idria, in the kingdom of Illyria; and zinc, coal, salt, and many other minerals in various places. Galicia is famous for its salt mines, the most celebrated

of which are at Wielicza, 8 miles south of Cracow, where the pits have been sunk to a great depth, and galleries and subterraneous chambers of immense size have been formed. The principal mine is more than a mile long, 1,000 feet broad, 743 feet deep, and has been worked above 600 years.

Chief Towns.] *Vienna*, the capital of the Austrian empire, and the largest city in Germany, is pleasantly situated on the right side of the Danube, where it receives a small river called the *Vien*, which passes through the city and suburbs, lon. $16^{\circ} 23'$ E. lat. $48^{\circ} 13'$ N. The houses are built of stone and are generally 6 or 7 stories high. Among them are numerous and beautiful palaces, but many of the streets are narrow and crooked. The university of Vienna was founded in 1365, and has been particularly celebrated for its medical school. The library of the university contains 90,000 volumes and the imperial library 300,000. The charitable institutions are numerous, and in one of the hospitals there are annually received 16,000 patients. The mortality of this city is thought to be greater than that of any other place in Europe, and it is commonly said that one in 20 dies annually. The population is 240,000.

Prague, the capital of Bohemia, is on the Moldau, in lat. $50^{\circ} 5'$ N. Its university is the oldest in Germany, having been founded in 1348, and has at present 40 professors, 900 students, and a library of 100,000 volumes. Linen, cottons and silks are manufactured extensively at Prague. The population is 85,000, of whom 7,000 are Jews.

Trieste, the largest town in the kingdom of Illyria, is an important sea-port on the Adriatic, at the N. E. part of the gulf of Trieste. Its commerce is very extensive, it being estimated that 3,000 vessels enter and leave the port annually. The population is 38,000.

Brunn, the capital of Moravia, is 75 miles N. of Vienna. It has 25,000 inhabitants, who are engaged principally in the manufacture of fine cloth and silks. *Austerlitz*, 12 miles E. S. E. of Brunn is celebrated for the great battle fought near it, on the 2d December 1805, between the French commanded by Bonaparte and the united forces of Austria and Russia, which ended in the total discomfiture of the Austro-Russian army.

The following are the other principal towns in the German part of the Austrian empire.

Innsbruck, the capital of the Tyrol, is situated at the conflux of the Sill and the Inn and has 10,000 inhabitants. *Troppau*, the principal town in Austrian Silesia, is on the Oppa, a branch of the Oder, and has 9,700 inhabitants. *Lintz*, on the Danube at the influx of the Traun, has a great woollen manufactory established by government, which gives employment directly or indirectly to 25,000 individuals in the town and surrounding country. Population 17,000. *Salzburg*, in Lower Austria, is romantically situated amidst lofty mountains on the Salza, a branch of the Inn, in lon. 13° E. lat. $47^{\circ} 48'$ N. and contains 13,000 inhabitants. *Graz*, the largest town in Stiria, is on the Muhr, a branch of the Drave,

and has 34,000 inhabitants. *Laybach*, in the kingdom of Illyria, 28 miles N. E. of Trieste, has 11,000 inhabitants. *Botzen*, in the Tyrol, on the Eisach, a branch of the Adige, is celebrated for its great fairs, of which four are held annually. Population 8,000.

Pest, the largest town in Hungary, is 130 miles E. S. E. of Vienna, on the E. bank of the Danube. The university, the only one in Hungary, is richly endowed, and has 40 professors and between 700 and 800 students. The manufactures are various and the trade extensive, particularly at the fairs which are annually held here. Population 42,000. *Buda*, the capital of Hungary, is on the west bank of the Danube, opposite Pest, with which it is connected by a bridge of boats. It is famous for its baths, which are efficacious in palsy and similar complaints. Population 30,000. *Presburg*, the former capital of Hungary, is on the N. bank of the Danube 38 miles east of Vienna. It contains 30,000 inhabitants.

The following are the other considerable towns in the Hungarian states. *Schemnitz* is a large mining town 83 miles N. E. of Presburg. The mines of Schemnitz are the most extensive in Hungary, and the works are now at a great depth, the tunnel for drawing off the water being more than 1,100 feet below the surface. The chief metals are gold, silver, and lead. Population 23,000, of whom 12,000 are employed in or about the mines. *Cremnitz* is another celebrated mining town 18 miles N. W. of Schemnitz, with a population of 10,000. *Esseck*, the largest town in Slavonia, is on the right bank of the Drave, two miles above its influx into the Danube, and has 9,000 inhabitants. *Agram*, the capital of Croatia, is 145 miles S. of Vienna, near the left bank of the Save, and has 17,000 inhabitants. *Zara*, the capital of Dalmatia, is a strongly fortified town and sea-port on the Adriatic, in lon. $15^{\circ} 38'$ E. lat. $44^{\circ} 16'$ N. Population 5,000. *Clausenburg*, the capital of Transylvania, is on the Samos, a branch of the Theiss, and contains 14,000 inhabitants. *Hermannstadt*, formerly the capital of Transylvania, is 90 miles E. S. E. of Clausenburg and has 16,000 inhabitants. *Cronstadt* is a large trading town, with 23,000 inhabitants.

Milan, the capital of the Lombardo-Venetian kingdom, is on the small river Olona, in a beautiful plain between the Tesino and the Adda. Its public buildings are remarkably magnificent. The cathedral is the grandest and most imposing specimen of Gothic architecture extant, and after St. Peter's at Rome, and St. Paul's of London, is the finest church in Europe. The hospitals of Milan are numerous and on a large scale. The principal literary institutions are the university, and the Ambrosian college, the last of which has a library of 140,000 volumes and 15,000 manuscripts. The population of Milan in 1820 was 135,000.

Venice is a famous city situated in a bay of the Adriatic on 72 small islands, which are connected together by 450 bridges, the longest and most beautiful of which is the Rialto. The city is intersected in every direction by canals, which answer the purpose

of streets, passengers being carried to the various parts of the town in covered boats called gondolas. The city has no fortifications, but is well protected from attack by a shallow marshy lake 5 miles broad, which separates it from the continent. The houses in Venice are all of stone, but most of them are mean buildings. Some of the public buildings are very fine and contain beautiful paintings. The city has considerable trade and manufactures and 109,000 inhabitants, of whom 2,500 are Jews and about 20,000 beggars.

Mantua is situated principally on two islands, formed by the river Mincio 70 miles E. S. E. of Milan, and is both by nature and art one of the strongest places in Europe. In the centre of one of the squares stands Virgil's monument, a column of marble, resting on a pedestal of the same material, with a bronze statue of the poet at the top. The population in 1780 was nearly 30,000 but at present does not exceed 23,000.

The following are the other considerable towns in Austrian Italy. *Padua* is on the Brenta, 20 miles west of Venice, and contains 31,000 inhabitants. Its university was formerly celebrated throughout Europe, and resorted to by crowds of students from countries beyond the Alps: it has now 32 professors, but on an average not more than 300 students. *Cremona* stands in a beautiful plain on the Po, 38 miles S. E. of Milan, and contains 30,000 inhabitants. *Brescia* is a large city 43 miles E. of Milan, containing 40,000 inhabitants. *Lodi*, on the Adda, 17 miles S. E. of Milan, contains 17,000 inhabitants. One of the most daring exploits of Bonaparte's military career was performed here in 1796, by forcing with the bayonet the passage of the bridge over the Adda, though defended by 10,000 Austrians. *Pavia*, on the *Tesino*, 4 miles from the spot where it joins the Po, has a university and 23,000 inhabitants. *Verona* is a fortified town on the Adige and contains 55,000 inhabitants. In the Guildhall of the city are the statues of 5 illustrious natives of Verona, viz. Catullus, Marcus Æmilius, Cornelius Nepos, the elder Pliny and Vitruvius. Here also is still to be seen a celebrated Roman amphitheatre large enough to accommodate 22,000 spectators.

Lemberg, the capital of Galicia, stands on the *Pelten*, a branch of the *Dniester*, in lon. 24° E. lat. 49° 50' N. and contains 44,000 inhabitants. It is the principal thoroughfare from *Odessa* and other ports on the Black sea to Vienna and the rest of Germany, and has an annual fair on a very large scale. *Brody*, 70 miles E. of *Lemberg*, has 24,000 inhabitants, of whom 16,000 are Jews. It carries on an extensive commerce with Turkey, Russia and Poland.

Military District.] The military district is a narrow tract of country extending along the whole Turkish border through Croatia, Slavonia, Hungary and Transylvania. This district is under a military constitution, all the men who inhabit it being regarded as soldiers; and it is their duty to keep guard on the border day and night. The population of the military district is more than 900,000, of whom 100,000 are able to bear arms, and

from this number a body of about 45,000 are kept constantly in service, without any expense to the state in time of peace. These troops are distinguished for their bodily strength, bravery and loyalty.

Population.] The population is nearly 28,000,000, and consists principally of five great races in the following order: 1. Slavonians, in the Hungarian states, Galicia, Bohemia, Moravia and Silesia, about 11,750,000; 2. Magyars or proper Hungarians, about 4,000,000; 3. Germans, about 5,000,000; 4. Italians, almost 5,000,000; 5. Wallachians, about 1,400,000. There are besides nearly 300,000 gypsies, chiefly in Hungary and Transylvania, and 400,000 Jews, with a few Greeks and Armenians.

Gypsies.] This singular race of people are dispersed over almost every country in Europe, but are most numerous in the Austrian dominions. They made their first appearance in Germany in the 16th century, and historians are not agreed as to their origin, some considering them as Egyptians who agreed to leave their country and disperse in small parties over the world, while others regard them as of Hindoo origin. Their whole number in Europe is believed to exceed 700,000. England endeavoured to expel them in 1530; France in 1560; and Spain in 1591; but never with complete success. For three centuries they have continued the same, wherever they have gone. Their swarthy complexion, their physiognomy, and their manners and habits have not been affected by the lapse of time, the variation of climate, and influence of example. In the neighborhood of civilized life they continue barbarous; and in the midst of cities and villages, they live in tents and holes of the earth, and wander from place to place as fugitives and vagabonds. The women are fortune-tellers, and the majority of both sexes are lazy beggars and thieves.

Religion.] The established religion is the Roman Catholic; but in Hungary, Transylvania and Slavonia, members of the Protestant and Greek churches have long been settled and in the enjoyment of considerable privileges. Indeed since the time of Joseph II. who commenced his reign in 1765, free toleration has been granted to all sects throughout the Austrian dominions. The number of the various sects is estimated as follows: Roman Catholics, nearly 22,000,000; Greek Christians, 2,500,000; Lutherans and Calvinists, 3,000,000; Jews, 400,000, and Unitarians, 42,000.

Education and Language.] There are universities at Vienna, Prague, Innsbruck, Lemberg, Pest, Padua and Milan. Since the time of Joseph II. Austria has had a national literature, which is not confined to the German part of her population, but extends to the Slavonians, Magyars, Greeks and Jews, and among these nations is still in a progressive state, but among the Italians it is stationary. The German language is the language used in the courts of justice throughout a large portion of the empire, but in many parts of Hungary Latin is the language of business and of literature, and in Italy, the Italian.

Government.] The government is monarchical, but in some provinces the emperor has much more power than in others. In Hungary his power is limited by the diet, which is composed of four states or classes, 1st, the Catholic prelates; 2d, the higher nobility; 3d, the representatives of the inferior nobles; and 4th, the representatives of the royal free towns. The Tyrolese also possess many privileges. Austrian Italy was erected into a kingdom by an edict of the emperor in 1815, and though inseparable from the Austrian empire, it has its own constitution, at the head of which is a prince of the imperial family, with the title of viceroy. Galicia bears the title of kingdom, and is governed by a viceroy; and in 1817 a liberal constitution was published, and a representative government established. Bohemia and Moravia have each an assembly of states but their power is merely nominal. The administration of the whole empire centres in Vienna, and is composed of a number of boards, under the name of councils, chanceries and conferences. In the German diet, Austria presides, and has one vote; in the general assembly she has four votes.

Revenue and Debt.] The annual revenue is estimated at about 60,000,000 dollars. The public debt before the French revolution was \$90,000,000; in 1805, more than \$350,000,000, and now more than \$650,000,000.

Army and Navy.] The army on the peace establishment consists of 220,000 infantry, 36,000 cavalry, with about 15,000 artillery. For the protection of trade, a few frigates and other armed vessels are kept up on the Adriatic; while on the Danube, towards the Turkish frontier, are stationed the vessels called tschaiken, manned by about 1,000 soldiers and seamen.

Manufactures and Commerce.] Austria has recently become a manufacturing state, and has not only made herself in this respect almost independent of foreign nations, but manufactured goods are to some extent articles of export. In the Hungarian states there is very little industry. The provinces which are most distinguished for their manufactures are Bohemia, Moravia, and the part of Lower Austria which lies below the Ens. Commerce is carried on partly by sea but principally by land. The principal sea-ports are Trieste and Venice. The principal centres of the land trade are Vienna, Prague, Brunn, Brody, Botzen, Pest and Cronstadt.

TURKEY.

Situation and Extent.] The Turkish empire lies in the centre of the Eastern continent, embracing a portion of Europe, Asia and Africa. Turkey in Europe is bounded N. by the Austrian dominions and Russia; E. by the Black sea, the sea of Marmora and the Archipelago; S. by the Mediterranean; and W. by the Ionian sea, the Adriatic sea and Dalmatia. It extends from 34° $30'$ to 43° N. lat. and from 16° to 29° E. lon. The area is estimated at 206,000 square miles.

Divisions.] Turkey in Europe is commonly divided into the following provinces:

Provinces,	Square miles.	Population.	Pop. on a sq. m.
I. Moldavia,	17,000	400,000	23
II. Wallachia,	24,658	950,000	38
III. Servia,	20,165	960,000	47
IV. Bosnia with Turkish Croatia and Herze- govina,	16,000	850,000	53
V. Bulgaria,	38,000	1,800,000	47
VI. Rumelia,	35,990	2,200,000	61
VII. Albania,	48,526	1,920,000	40
1. Macedonia,	15,780	700,000	44
2. Albania proper,	15,210	207,000	13
3. Thessaly,	3,618	300,000	82
4. Livadia,	6,028	249,000	41
5. Morea.	7,890	464,000	59
VIII. Province of the Cap- tain Pacha,	1,863	240,000	129
1. Province of Gallipoli,	833	100,000	124
2. Islands of the Archipelago,	1,030	140,000	136
IX. Candia or Crete,	4,218	281,000	66
Total,	206,000	9,600,000	46

Straits.] The Bosphorus or straits of Constantinople connects the Black sea with the sea of Marmora. The strait of the Dardanelles, (the ancient Hellespont,) connects the sea of Marmora with the Archipelago. The strait of Otranto connects the gulf of Venice with the Mediterranean.

Peninsulas.] Greece, or the country inhabited by the descendants of the ancient Greeks, embracing all that portion of Turkey which lies south of the parallel of 41° $30'$ N. lat. is a peninsula, jutting out into the Mediterranean and separated by the Ionian sea from Italy on the west and by the Archipelago from Asia Minor on the east. At the southern extremity of this peninsula is the sub-peninsula of the Morea (the ancient Peloponnesus)

connected with the rest of the continent by the isthmus of Corinth. The province of Gallipoli is a peninsula lying along the N. side of the strait of the Dardanelles.

Bays.] The largest bay is the gulf of *Salonica*, which forms the north-western arm of the Archipelago. East of the gulf of *Salonica* and separated from it and from each other by narrow peninsulas are the gulfs of *Cassandra*, *Monte Santo*, and *Contesse*. The gulf of *Lepanto* is on the north side of the *Morea*. The gulf of *Egina* is on the east side of the *Morea*, and separated from the gulf of *Lepanto* by the isthmus of *Corinth*, which in its narrowest part is only 5 or 6 miles across.

Mountains.] The *Carpathian* mountains form part of the boundary between *Turkey* and *Hungary*, but the principal mountains of *Turkey* are the *Hæmus* ridge, a branch of the *Alps*, which enters the country at its N. W. corner and proceeds in a semicircular form along the southern border of *Bosnia*, *Servia* and *Bulgaria*, separating the waters which flow north into the *Save* and the *Danube* from those which flow south into the *Adriatic* and the *Archipelago*, and terminating on the coast of the *Black sea* at *cape Eminéh*, in lat. $42^{\circ} 30' N$. From the centre of this range a chain proceeds in a northerly direction between *Servia* and *Bulgaria*, and crossing the *Danube* at *Orsova* unites with the *Carpathian* mountains. Another chain, called the *Rodope* mountains, proceeding from nearly the same point, runs in a S. E. direction towards the strait of the *Dardanelles*. The *Pangæus* chain is a branch of the *Rodope*, which leaves it nearly at the commencement of its course and proceeds in a southerly direction towards the gulf of *Contesse*. Still farther west a chain proceeds from the *Hæmus* in a southerly direction to the peninsula included between the gulf of *Contesse* and the gulf of *Salonica*.

Down the middle of the peninsula of *Greece*, and parallel to its two coasts, runs a continuous range of lofty mountains, dividing the waters which flow east into the *Archipelago* from those which flow west into the *Ionian sea*, and varying in height from 7 to 8,000 feet in the northern and central part, to as many hundred near the southern extremity. Of the former height may be reckoned the ridge of *Pindus* and *Parnassus*, while *Parnes*, *Pentelicus* and *Hymettus* in *Attica* do not exceed the latter. Branches are thrown off towards either coast from this central chain: to the eastward, the celebrated *Olympus*, rising near the head of the gulf of *Salonica*, to the height of 6,000 feet, forms the north extremity of an inferior chain, consisting of *Ossa* and *Pelion*, *Oeta* and *Othrys*, and continuing in a S. E. direction through the island of *Negropont*. The central range of *Grecian* mountains is continued in a northerly direction till it meets the *Hæmus* chain.

One of the most celebrated single mountains is *Monte Santo*, anciently called *Mount Athes*, situated on the point of a peninsula formed by the gulfs of *Contesse* and *Monte Santo*, and nearly due west of the island of *Lemnos*. To the readers of *Grecian* history it is well known by its ancient name; the modern one of *Monte*

Santo (Holy mount) it has derived from the number of Greek monasteries that are built upon it. They amount to nearly 30, are protected by fortifications from the incursions of the corsairs, and are inhabited by about 6,000 monks, who are supported chiefly by the voluntary contributions of the Greek Christians in Russia, Wallachia, Moldavia, and other countries where the monks of Monte Santo are held in high esteem. Each of the 4 principal monasteries has one or more professors for the instruction of young ecclesiastics of the Greek church.

Rivers.] All the considerable rivers north of the Hæmus chain of mountains are tributaries of the Danube. The Danube enters the country at Belgrade, and after washing for some distance the northern border of Servia, it separates Bulgaria from Wallachia and Bessarabia, and discharges itself through five mouths into the Black sea. Its principal tributaries are, 1. The *Save*, which rises in Germany, but during the latter part of its course forms the boundary between Turkey and the Hungarian states, and joins the Danube at Belgrade, after receiving from the south the *Bosna* and the *Drin*. 2. The *Aluta*, which rises in Transylvania, and running south through Wallachia discharges itself into the Danube nearly opposite Nicopoli. 3. The *Sereth*, which rises at the foot of the Carpathian mountains in Austrian Galicia, and flowing in a S. E. direction through the principality of Moldavia falls into the Danube 4 miles above Galatz. 4. The *Pruth*, which rises also in Galicia, and passing through Moldavia joins the Danube a little below the mouth of the Sereth: the Moldavian part of the river forms at present the boundary between the Turkish and Russian dominions.

The principal rivers south of the Hæmus chain are, 1. The *Marissa*, which rises in the angle formed by the Hæmus and the Rodope mountains and running at first east and afterwards south passes by Philippopoli, Adrianople and Trajanopoli, and falls into the gulf of Enos. 2. The *Strymon*, which falls into the head of the gulf of Contesse. 3. The *Vardar*, which falls into the head of the gulf of Salonica after a S. E. course of 200 miles, during which it receives many tributaries. 4. The *Salambria*, the ancient *Peneus*, which rises at the foot of the Pindus chain, and flowing through a wild and picturesque country, passes between the mountains of Olympus and Ossa, and after having received numerous branches which intersect the plains of Thessaly discharges itself into the gulf of Salonica through the celebrated defile of Tempe. 5. The *Drin*, a large river of Albania, which falls into a bay of the Adriatic called the gulf of Drino or Lodrino.

Face of the Country.] The general aspect of the country in Greece is mountainous, but there are also extensive vallies and beautiful plains, some of which are elevated to a considerable distance above the level of the sea. The most considerable level tract is the plains of Thessaly, which extend for some distance on each side of the Salambria. In Moldavia the face of the country consists of undulating plains of great beauty and vast extent, except towards the western frontier where the Carpathian range

produces a rugged and mountainous surface. The parts of Wallachia and Bulgaria lying along the Danube, and extending on each side to the foot of the mountains, are principally a level country. The rest of Turkey is intersected by numerous mountain ridges, between which are many fertile vallies.

Climate.] The climate is generally mild and delightful, the air pure and the seasons regular. The climate of Greece is more severe in winter, and in many parts warmer in summer, than that of the south of Italy. On the elevated plains of the Morea, snow sometimes falls to the depth of 18 inches. In Attica, which embraces the country between the channel of Negropont and the gulfs of Lepanto and Egina, the atmosphere is more moderate and equable than in most other parts of Greece, the air being generally clear, dry and temperate.

Soil and Productions.] The soil is generally very fertile, producing corn, rice, cotton, the olive tree, fine fruit, wine, and tobacco in the richest abundance. On the plains of Thessaly are cultivated extensive groves of mulberry-trees for the silk worm. The Morea is celebrated for the excellence of its silks, and all the accounts given by the ancient Greeks, of the fertility of Messenia, in the S. W. part of the Morea, are realized at this day in every species of produce, more especially in corn, wine, and figs. The richest produce of Attica is the olive. Hymettus has from time immemorial been celebrated for the excellence of its honey, and it is still in high esteem. But notwithstanding the delightful climate, the fertile soil and the variety and richness of the productions, large portions of Turkey lie uncultivated. The people are so oppressed by an arbitrary and despotic government that they are without motives for industry.

Chief Towns.] *Constantinople*, called by the Turks *Stamboul*, the capital of the Turkish empire, is beautifully situated on the west side of the Bosphorus. The city stands chiefly on a slope, on seven eminences, which seem to rise above each other in beautiful succession, presenting a fine view to the approaching spectator. The harbor is not on the side of the sea but in a long capacious inlet running along the north side of the town. It is of sufficient depth for the largest vessels, and can contain 1,200 sail. The city is triangular in its form, with one side on the harbor, another on the sea of Marmora, and the third and longest towards the land, and is surrounded on all sides with walls. The streets are in general narrow, gloomy and badly paved. The houses are built principally of wood, and the city frequently suffers from desolating fires. The number of mosques is about 300, and of these the most splendid is that of St. Sophia. The seraglio is an assemblage of palaces and gardens, several miles in circumference, inhabited by the Sultan and his court, and surrounded by a wall. It occupies the promontory or point of land in the eastern part of the city. The part of the seraglio occupied by the wives and concubines of the Sultan is called the Harem. The city is visited almost every year by the plague which sweeps off

thousands of the inhabitants. The population is variously estimated from 300,000 to 500,000; about one half are Turks, and the remainder Greeks, Armenians, Franks and Jews.

Adrianople, the second city in European Turkey, in respect to population, is situated in a beautiful country, on the Marissa, 130 miles N. W. of Constantinople, and contains 130,000 inhabitants, of whom 30,000 are Greeks.

Salonica is pleasantly situated at the N. E. extremity of the gulf of the same name. It contains 70,000 inhabitants, and in regard to trade this place ranks first after Constantinople. The city occupies the site of the ancient Thessalonica, to whose inhabitants St. Paul addressed two of his epistles.

Belgrade is a famous town and fortress in Servia, near the confluence of the Save and the Danube. It commands the Danube and is regarded as the key to Hungary, and has therefore been frequently an object of fierce contention between the Austrians and the Turks. The population is 30,000.

Bukarest, the capital of Wallachia, is situated nearly in the centre of the province on a branch of the Danube and contains 80,000 inhabitants. *Jassy*, the capital of Moldavia, is situated near the Pruth on the eastern border of the province, and contains 15,000 inhabitants. *Sophia*, the capital of Bulgaria, is on the high road from Constantinople to Belgrade, and has 50,000 inhabitants, and an extensive trade, which is chiefly in the hands of Greeks and Armenians. *Galatz*, in Moldavia, on the Danube, near its confluence with the Pruth, is a small place but has a good harbor which admits large ships to come up to the town, and almost all the trade between Constantinople and the principalities of Moldavia and Wallachia passes through it. *Joannina*, the capital of Albania, and the residence of Ali Pacha, the celebrated independent chief, is situated 115 miles S. W. of Salonica, in lon. $21^{\circ} 38'$ E. lat. $39^{\circ} 30'$ N. and contains between 35,000 and 40,000 inhabitants.

Athens, anciently the capital of Attica, and the birth-place of the most distinguished orators, philosophers, and generals of antiquity, is now an insignificant town in the province of Livadia. It stands on the rivulets of Ilissus and Cephissus, a few miles from the shore of the gulf of Egina. Its ruins, unlike those of Delphos, Delos, Olympia, Argos, Sparta, Corinth and other once famous places of Greece, remain for the most part in a state little inferior to their original splendor. Here are still to be seen the citadel, which is now occupied by the Turks as a fortress; the temple of Minerva, the grand display of Athenian magnificence, now converted into a mosque; the areopagus or hill of Mars, which is now used as a burying place by the Turks; the ruins of the ancient walls and numerous other monuments of Athenian grandeur. The population at present is about 10,000, of whom one fourth are Turks and the remainder Greeks.

Corinth, formerly one of the most flourishing cities of Greece, is situated near the isthmus of Corinth, 48 miles E. of Athens. It

contains at present only 1300 inhabitants. *Philippi* is a village situated at the foot of Mount Pangæus, 80 miles E. by N. of Salonica, and 8 miles from the sea. The adjacent plains are famous for the battle in which Brutus and Cassius were slain. *Mistra* or *Mistra* in the southern part of the Morea, 28 miles S. of Tripolizza, is within two miles of the site of the ancient Sparta. *Pharsalia*, in Thessaly, 18 miles S. E. of Larissa, contains 5,000 inhabitants. It lies adjacent to the plain so well known for the decisive victory gained by Cæsar over Pompey. *Thebes*, anciently the capital of Boeotia, is 28 miles W. N. W. of Athens, and contains at present 5,000 inhabitants. *Platæa*, the scene of the famous battle with the Persians, is 8 miles S. of Thebes.

Dardanelles.] The Dardanelles are two old and strong castles on the Hellespont, (sometimes called from them the strait of the Dardanelles) between the sea of Marmora and the Grecian Archipelago. One is situated in Europe, the other stands on the Asiatic side of the strait. There are on each side 14 great guns, adapted to discharge granite balls; they are of brass, with chambers like mortars 22 feet long, and from 25 to 28 inches in the bore. These castles are called the *Old Dardanelles*, to distinguish them from two others built at the entrance of the strait, about 10 miles to the southwest, one of which stands in like manner in Asia, and the other in Europe.

Population.] The population is variously estimated from 8 to 10,000,000. Of the whole number about one quarter are Turks, one third Greeks, and the remainder Slavonians, Wallachians, Armenians, Jews, gypsies and Franks. The Turks are most numerous in the province of Rumelia, the Greeks in the peninsula below the parallel of $41^{\circ} 30'$ N. lat.; the Slavonians in Bulgaria, Servia and Bosnia; and the Wallachians in Wallachia and Moldavia.

Greeks.] The modern Greeks, oppressed by a despotic government, bear but a faint resemblance to their ancestors. They discover, however, an active and enterprising disposition, and the commerce of the Turks is carried on principally by Greek mariners, and there are many wealthy Greek merchants on the continent and among the islands. Much has been said of late in Europe of the restoration of ancient Greece, and the Greeks themselves have begun to direct their attention to literary pursuits. Their progress in the ancient Greek language and in general literature, during the last 30 years, has been very considerable. With their literary improvement, their desire for independence has been increased, and among the higher class of citizens, there prevails a very acute feeling at their present degraded state, and a degree of enthusiasm and veneration for their ancient heroes, poets, philosophers and statesmen, which would do honor to any nation.

Religion.] The established religion of Turkey is Mahommedan, but at least two thirds of the inhabitants are Christians attached to the Greek church. The *Mufti* is the head of the Mahommedan religion. He is appointed by the Sultan and is the second sub-

ject in the empire. The priests are called *imams*. The *dervises* are monks, and live in cloisters. The Patriarch of Constantinople is the head of the Greek church, and enjoys an ample revenue. Christians of all denominations are allowed to reside in the empire, but they must pay a heavy poll-tax and are subject to severe oppression.

Government.] The government is an unlimited despotism. The Emperor, who is also styled Grand Sultan and Grand Seigneur, has absolute power of life and death, and sometimes exercises it with brutal cruelty. The Grand Vizier is his first officer, and the most powerful subject in the empire, uniting in his own person the authority of prime minister, chief justice, and commander in chief of the army. The Captain Pacha is the first admiral and minister of marine. The provinces are termed pachaiks, and their governors, called pachas, have a power almost as unlimited as that of the emperor. The pachas frequently rebel against the sovereign and sometimes successfully. The celebrated Ali Pacha, one of these rebel chiefs, has brought under his own dominion not only the whole of Albania proper, but a considerable part of the adjoining territories. The extent of his dominions is said to be 30,000 square miles; the population, between 1 and 2,000,000; the revenue, £500,000; and the regular army about 10,000 men. Joannina is his capital.

The principalities of Wallachia and Moldavia are not properly a part of the Turkish empire. They were originally independent, but the inhabitants, being overpowered by the Turks, entered into a treaty, in which they agreed to pay a certain tribute annually, but expressly reserved to themselves the entire management of their internal concerns. This treaty is still binding, but the Turkish government has gradually encroached upon its provisions, so that they have now become a mere dead letter. The Grand Sultan has for a long time assumed the power of appointing the princes or Voivodes of these principalities, and from motives of policy, they have uniformly been for nearly a century wealthy Greeks from Constantinople, who have purchased the office by extravagant bribes and an entire subserviency to the will of the Sultan. The oppressed people regard the Russian government as their natural protector, and it has frequently interfered in their behalf.

Manners and Customs.] The Turks differ greatly in their manners from other European nations. Polygamy is practised, every Mussulman being allowed by the Koran to have four wives and as many concubines as he pleases. The concubines are usually slaves purchased in the market. In eating, the Turks make no use of knives and forks, but divide their food with their fingers. They are extravagantly fond of opium, and spend a great deal of time in chewing and smoking, and in the indulgence of the reverie which they occasion. Their dress consists of loose flowing robes, and the men use turbans instead of hats.

Army and Navy.] The Turkish army consists of about 300,000 men, of whom 40,000 are Janissaries or regular infantry, 20,000

artillery and 20,000 regular cavalry. The rest are a mere rabble of irregular troops. The Turkish soldiers are brave and rush with enthusiasm to an attack, firmly believing that if they fall in battle they shall be immediately received into paradise; but they are without discipline, and in their late wars with Russia, they have been uniformly beaten. The Turkish government is fully sensible of the advantages to be derived from the improved European tactics, and about 20 years ago actually introduced them, but the prejudices of the common people in favor of the old mode of fighting, and the violent clamor of the Janissaries have forced the government to abandon all attempts at innovation. The navy in 1806 consisted of 20 ships of the line, 15 frigates, and 82 smaller vessels, but it is now greatly reduced.

Revenue.] The public revenue is estimated at about 12,000,000 dollars. The public debt in 1807 was between 50 and 60,000,000. The private revenue of the Sultan, arising from the royal domains, escheats, presents, and extortions from the rich Christians and from public officers is very great.

Manufactures and Commerce.] Notwithstanding the abundance and variety of raw materials, the manufactures of this country are not flourishing. The Turkey carpets, however, have been long distinguished for their beauty; as have the printed muslins of Constantinople, and the crapes and gauzes of Salonica. The brass cannon of the Turks are admired, and their sword blades are held in great estimation by foreigners. Morocco leather is also manufactured in large quantities and of the best quality. The commerce is considerable, but is carried on principally by the Greeks, Armenians, and Jews. The exports, besides the above mentioned manufactures, are corn, wine, oil, figs, currants, &c.

ISLANDS.

Candia, the ancient *Crete* and one of the largest islands in the Mediterranean, is situated to the south of the Archipelago. It contains 4,318 square miles and more than 280,000 inhabitants, of whom 130,000 are Greeks and 150,000 Turks. A chain of mountains runs through the island from E. to W. in the centre of which rises the lofty *Pelorit*, the *Ida* of the ancients, and near which is the famous labyrinth. The climate is pleasant and the soil fertile, yielding corn, wine, oil, raisins, &c. but the insecurity of property under the Turks represses all attempts at extensive cultivation.

Negropont, the largest island in the Archipelago, lies along the eastern coast of Greece, from which it is separated by a narrow channel. It contains 482 square miles and about 50,000 inhabitants. *Negropont*, the capital, is on the west coast of the island, and connected with the continent by a bridge, the channel at this

place being only 200 feet wide. Here is generally stationed a flotilla of Turkish gallies.

Hydra is a small island, only 10 miles long and 2 broad, lying near the east coast of the Morea. It is rocky and little cultivated but very populous and commercial. The number of vessels belonging to *Hydra* amounts to 200, carrying from 100 to 400 tons each. They trade not only to the ports of the Archipelago and Mediterranean, but to France, Spain, Italy and other countries. The *Hydriot* sailors are considered the most intrepid navigators in the Archipelago, and several of the merchants are very wealthy. Population about 20,000.

The *Cyclades* is the name given by the ancients to a large group of islands lying S. E. of Negropont. *Andros* is the most northerly, and *Santorin* the most southerly; the others of note are *Tino*, *Zea*, *Myconi*, *Naxia*, *Paros*, *Antiparos*, *Milo*, *Nio*, *Amorga*, and *Stampalia*. Of these *Paros* is celebrated for its marble, and *Antiparos* for its subterranean cavern or grotto.

Skyro lies east of the island of Negropont, *Scopelo* near the mouth of the gulf of Salonica, and *Lemnos* nearly east of Mount *Athos*. The other considerable islands in the Archipelago will be more properly described under Turkey in Asia.

ASIA.

Situation and Extent.] Asia is bounded on the N. by the Arctic or Frozen ocean; E. by the Pacific ocean; S. by the Indian ocean; and W. by Africa, the Mediterranean sea and Europe. It extends from 2° to 77° N. lat. and from 26° to 190° E. lon. The area is estimated by Hassel at 16,728,000 square miles.

Divisions.] Asia will be most conveniently described under the following divisions. 1. Turkey in Asia. 2. Russia in Asia. 3. Arabia. 4. Persia. 5. Cabul, including Beloochistan. 6. Hindoostan or Hither India. 7. Farther India. 8. Chinese empire. 9. Japan. 10. Asiatic islands.

Seas, Bays and Gulfs.] Along the southern coast are the *Red sea* or *Arabian gulf*, 1,400 miles long, lying between Asia and Africa; the *Persian gulf*, between Arabia and Persia; and the *bay of Bengal*, between Hindoostan and Farther India; all these communicate with the Indian ocean. On the eastern coast there are four seas; the *China sea* in the south, the *Yellow sea* and the *sea*

of Japan in the middle, and the sea of Okhotsk in the north. All these communicate with the Pacific ocean. The gulf of Siam and the gulf of Tonquin are arms of the China sea. The sea of Kara and the sea of Oby, in the north-west, communicate with the Arctic ocean. The sea of Azoph, the Black sea, the sea of Marmora, and the Grecian Archipelago lie on the boundary between Asia and Europe. The Mediterranean washes the western coast of Asiatic Turkey.

Straits and Isthmus.] The strait of Babelmandel connects the Red sea with the Indian ocean. The strait of Ormus connects the Persian gulf with the Indian ocean. The straits of Malacca separate the island of Sumatra from the peninsula of Malaya, at the southern extremity of Farther India. The strait of Jenikale connects the sea of Azoph with the Black sea. The Bosphorus connects the Black sea with the sea of Marmora. The strait of the Dardanelles connects the sea of Marmora with the Archipelago. The isthmus of Suez is the narrow neck of land which connects Asia and Africa, and separates the Red sea from the Mediterranean.

Lakes.] The Caspian sea is a large salt water lake, bounded N. by Russia; E. by Independent Tartary; S. and W. by Persia; and N. W. by Russia. It is 646 miles long from north to south and 265 in its greatest breadth, and though it receives several large rivers, particularly the Volga, the longest river in Europe, it has no outlet. In several places it is of great depth, but in others shallows are so frequent as to render the navigation dangerous. The sea of Aral, lying east of the Caspian, in Independent Tartary, is also a salt water lake about 150 miles long. Like the Caspian it receives several large streams, particularly the Oxus, but has no outlet.

Mountains.] The Ural or Oural chain of mountains is supposed to commence on the shores of the Arctic ocean, opposite the southern point of the island of Nova Zembla, and in the first part of its course forms the boundary between Asia and Europe, but afterwards continuing in a southerly direction it lies wholly in Asia, till it terminates between the Caspian sea and the sea of Aral.

The Altay chain may be regarded as a continuation of the Ural mountains. It commences a little north of the sea of Aral, and under various names passes in an easterly direction through the whole breadth of Asia, forming during the greater part of its course the boundary between the Russian and Chinese empires. It afterwards turns to the north and runs parallel to the eastern shore of the continent till it terminates at Behring's straits. It is the longest chain of mountains on the globe except the great American range, and throughout its whole extent it is eminently distinguished for the production of metals.

The Himala mountains, the highest on the globe, form the boundary between Hindoostan and Tibet. The central and highest part of this astonishing chain is that which gives rise on one side to the Ganges and its mighty tributaries, and on the other

to the Indus, the Burrampooter, and the Setledge, many of the peaks reaching here an elevation of 20,000 feet, and one of them, the Dholager or Dhawalagiri, rising to the height of 27,550 feet above the level of the ocean. As the chain proceeds eastward from this central point, although the peaks occasionally rise into the region of perpetual snow, the openings become wider, and the general character of the barrier less formidable. Farther east, although high and rugged, it is no longer characterized as snowy. After leaving Hindoostan, it is said to continue its progress under various names in an easterly direction through the southern provinces of China, and to approach the shore of the Pacific ocean in about lat. 25° N. opposite the island of Formosa, after which it turns towards the north and runs for some distance parallel with the coast. From the central point, near the source of the Ganges, the chain proceeds in a northwesterly direction still preserving the name of the Himmaleh till it reaches the northern extremity of Hindoostan, where it is pierced by the Indus. Beyond that river it turns to the west, and is called at first *Hindoo Coosh* or Indian Caucasus and afterwards the *Parapomisan mountains*, and under these names it separates Caubul from Independent Tartary, after which it passes through the northern provinces of Persia towards the Caspian sea. From the Hindoo Coosh a branch called the *Belur Tag*, proceeds in a northerly direction, forming a part of the boundary between Independent Tartary and the Chinese empire, and connecting the Himmaleh with the Altay chain. From the central point of the Himmaleh another branch called the *Moos Tag*, proceeds in a N.W. direction along the eastern and northern boundaries of Little Tibet, and connects itself with the *Belur Tag*, thus encircling Little Tibet on all sides with a mountain barrier.

The *Caucasian mountains* are a vast chain between the Black sea and the Caspian, more than 400 miles long and from 60 to 200 broad, and covered in some of its most elevated parts with perpetual snow. It commences on the shore of the Black sea near the strait of Jenikale and the mouth of the Kuban, and stretches in a S. E. direction to Derbend on the Caspian. A branch of these mountains winds along the western and southern shores of the Caspian and it is supposed connects itself with the *Parapomisan mountains*, and through them with the Himmaleh chain, but the country through which it passes has hitherto been but imperfectly explored.

The *Mount Taurus* chain commences in the northeastern part of Turkey in Asia near the sources of the Euphrates and the Tigris, where the Ararat rises into the reign of perpetual snow. It runs in a westerly direction along the southern shore of Asia Minor towards the Archipelago and terminates at cape Kelidoni near lat. 30° E. after sending off a branch to the south, which runs along the coast of the Mediterranean through Syria, and divides into the parallel chains of Libanus and Antilibanus. The *Zagros*, called by the Turks *Tag-Aiagha*, is a branch of the Mount Taurus chain, which leaves it soon after its departure from

Mount Ararat, a little west of lake Van, and running in a S. E. direction, parallel with the Tigris, passes through the southwestern provinces of Persia, and parallel with the coast of the Persian gulf till it terminates near the straits of Ormus.

The *Bogdo* is a chain of mountains whose loftiest summits rise near the centre of Asia to the height of more than 20,000 feet above the level of the ocean. It is said to send forth branches in all directions, towards the Altay mountains, the Moos Tag, the Belur Tag and the mountains of China, but all this part of Asia is as yet very imperfectly known.

Rivers.] The following are the principal rivers which discharge themselves into the Arctic ocean. 1. The *Oby*, which rises in the Chinese dominions in the centre of Asia and after piercing the Altay mountains, pursues a direction on the whole west of north, through the whole breadth of the Russian empire and discharges itself into the sea of Oby, after a course of more than 2,000 miles. Its principal tributary is the *Irtish*, which rises also in the centre of Asia near Mount Bogdo, and after flowing through the lake Nor Zaizan enters the Russian territory and joins the Oby in lat. 61° N. 2. The *Enisei* or *Jenisey*, which rises also on the south side of the Altay mountains near lat. 49° N. lon. 100° E. runs in a direction a little west of north and discharges itself into the Arctic ocean in lon. 80° E. after a course of more than 2,000 miles. 3. The *Lena*, which rises in the mountains west of lake Baikal in lon. 107° E. lat. $52^{\circ} 30'$ N. and running at first in a northeasterly and afterwards in a northerly direction discharges itself into the Arctic ocean after a course of nearly 2,000 miles.

The principal rivers which fall into the Pacific ocean are, 1. The *Amur* or *Saghalien Oula*, which rises in 49° N. lat. and 109° E. lon. and flowing on the whole in a direction N. of E. falls into a bay of the sea of Okhotsk opposite the northern part of the island of Saghalien in lat. 53° N. 2. The *Hoang-ho* or *Yellow river*, which rises in the unknown regions of central Asia, and pursuing at first an easterly course enters China proper near its N. W. corner, where it turns and runs in a northerly direction for 500 miles, and then making a complete bend proceeds towards the south for about the same distance, after which it resumes its original direction and falls into the sea near lat. 34° N. after a course of nearly 2,000 miles. 3. The *Yang-tse-Kiang* rises also in the unknown regions of central Asia, and after entering China pursues a direction N. of E. through the middle of the kingdom and falls into the sea about a hundred miles from the Hoang-ho. 4. The *Cambodia* (called also by many other names,) is a large river which discharges itself into the China sea near lat. 10° N. lon. 106° E. It is supposed that it rises in the mountains of Tibet, but the countries which it traverses are almost wholly unknown.

The principal rivers which fall into the Indian ocean are, 1. The *Ganges*, which rises on the south side of the central and loftiest part of the Himmaleh mountains between 31° and 32° N. lat. and 78° and 79° E. lon. and running on the whole in a S. E.

direction discharges itself into the bay of Bengal through many mouths after a course of 1,500 miles, during which it receives numerous tributaries. The *Burrampooter* or *Brahmaputra*, its principal tributary, rises on the north side of the Himmaleh mountains not far from the sources of the Ganges, and after flowing for more than half its course in an easterly direction, breaks through the mountains, and turning to the west and afterwards to the south joins the Ganges near its mouth. 2. The *Indus* is formed by two streams, both of which rise in Little Tibet between the Himmaleh and Moos Tag mountains. After their union the river takes a southwesterly direction and breaking through the mountains, runs along the western boundary of Hindoostan, and discharges itself through many mouths into the sea after a course of 1,300 miles. 3. The *Euphrates* is formed by two streams, which rise in the mountains of Armenia, and unite near lat. 39° N. and lon. 39° E. After their union the river runs on the whole in a southeasterly direction and falls into the head of the Persian gulf. Its whole length is more than 1,500 miles, and its principal tributary is the *Tigris*, which joins it 130 miles from its mouth.

The principal rivers which fall into the Caspian sea and the sea of Aral are, 1. The *Volga*, which discharges itself into the northern part of the Caspian through 70 mouths. 2. The *Oxus* or *Amu*, which rises in the southeastern part of Independent Tartary on the western declivity of the Belur Tag mountains, and receiving the waters from the northern face of the Hindoo Coosh chain, flows in a N. W. direction and discharges itself into the sea of Aral on its southern side, after a course of more than 1,200 miles. 3. The *Sir* or *Sihon*, which rises also on the western declivity of the Belur Tag mountains, and after a N. W. course of nearly 600 miles falls into the sea of Aral on its eastern side.

Face of the Country.] Next to the great mountain chains which traverse this continent, the most remarkable feature in the face of the country is the high table land which occupies nearly the whole of central Asia, and is supposed to be the most elevated and extensive tract of table land on the globe. It commences on the northern side of the Himmaleh chain, and is said to extend to the Altay mountains on the north and beyond China proper on the N. E. The western part is traversed by ranges of lofty mountains; but the eastern is occupied by the desert of *Cobi* or *Shamo*, which is an immense plain, extending from 88° to 112° E. lon. nearly 2,000 miles long and 500 broad, and covering an area of about 1,000,000 square miles. It contains numerous salt lakes, and is destitute of vegetation, except on the scattered oases or fertile spots, where a few wandering savages obtain a scanty subsistence.

TURKEY IN ASIA.

Situation and Extent.] Turkey in Asia is bounded N. by the sea of Marmora, the Black sea and Russia ; E. by Persia ; S. by Arabia and W. by the Mediterranean and the Archipelago. It extends from 30° to 42° N. lat. and from 26° to 49° E. lon. The area is estimated at about 500,000 square miles, without including the Syrian desert.

Divisions.] Asiatic Turkey is divided into 17 pachalics, most of which derive their names from their principal towns ; but the different parts of the country are still best known by other names, and both are therefore given in the following table.

	Pachalics.	Square miles.	Population.
Asia Minor also Anatolia,	1. Anatolia,	280,000	6,000,000
	2 Siwas,		
	3. Trebisonde,		
	4. Konieh,		
	5. Merasche,		
Syria, (including Palestine,)	6. Adana,	50,000	1,800,000
	7. Aleppo,		
	8. Tripoli,		
Mesopotamia also Algeziras,	9. Acre,	37,000	800,000
	10. Damascus.		
	11. Diarbekir,		
Turkish Ar- menia,	12. Orfa,	140,000	3,400,000
	13. Mosul,		
	14. Kars,		
Irak Arabi,	15. Van,		
	16. Erzerum,		
	17. Bagdad,		

Besides the pachalics mentioned above, there is a province composed of the island of Cyprus and of a small district on the continent adjacent to it on the north. All the islands in the Archipelago belong to the government of the Captain pacha in European Turkey.

Mountains] Armenia is throughout its whole extent a mountainous country. Mount Ararat is the highest summit and is believed by the Armenians to be the place on which Noah's ark rested after the flood had subsided. Its summit is 9,500 feet above the level of the sea and is covered with perpetual snow. The mount *Taurus* chain, called by the Turks *Kurun*, proceeds in a westerly direction from the mountains of Armenia towards Asia Minor, and divides into two branches, the principal of which, still bearing the name of *Taurus*, runs parallel with the southern coast of Asia Minor, at no great distance, and terminates at cape Keli-

doni near lon. 30° E. while the northern branch proceeds under various names along the coast of the Black sea. They are connected together in several places by spurs or short ridges proceeding from one to the other.

Mount Libanus, the ancient *Lebanon*, so celebrated in scripture poetry, runs parallel with the coast of Syria, at the distance of 30 or 40 miles, between 33° and $34^{\circ} 30'$ N. lat. Its highest summit is 10,200 feet above the level of the sea and is covered with perpetual snow. To the east of Libanus and separated from it by a fertile valley, is the parallel chain of *Antilibanus*. They are both connected with the *Mount Taurus* chain on the north.

Mount Hermon is one of the summits of *Antilibanus*, which rises near lat. 33° N. to the height of 8,949 feet above the level of the sea. The celebrated *Mount Carmel* is a fertile and woody mountain extending for several miles along the shore of the Mediterranean, immediately south of Acre, and rising in some places to the height of 2,000 feet.

Lakes.] The largest lake is the *Dead sea* or *Asphaltites* lake in the southern part of Palestine, between 31° and 32° N. lat. It is 60 or 70 miles long from north to south, by 10 or 15 broad, and though it receives the Jordan and several smaller streams it has no outlet. The waters of the lake are strongly impregnated with various saline substances, and their specific gravity is greater than any hitherto discovered. Great quantities of asphaltum or mineral pitch are always seen floating on the surface of the lake, and on the south side there is a mountain 2 miles long composed entirely of sal gem. Five cities including Sodom and Gomorrah, situated on this spot, were all swallowed up, according to Scripture, to satisfy divine vengeance for their unparalleled iniquity. Many absurd fables were formerly circulated respecting the Dead sea. It was affirmed that iron swims on its surface while light substances sink to the bottom; that the pestiferous vapors which issue from it are fatal to the birds attempting to fly across, and that a kind of fruit called the apple of Sodom grows on its banks, which is of a beautiful external appearance, but never ripens, and when opened discloses nothing but ashes. Modern travellers pronounce all these stories fabulous.

The lake of *Genesareth*, called also the *sea of Tiberias* and the *sea of Galilee*, lies about 60 miles north of the Dead sea. It is 15 miles long and 5 broad, and abounds with fish. The river Jordan passes through it. *Lake Van*, about 60 miles S.W. of mount Ararat, is a body of salt water 50 miles long and 30 broad.

Rivers.] 1. The *Euphrates* is formed by two streams, both of which rise in the mountains of Armenia, one near Erzerum, and the other between mount Ararat and lake Van. After their union the river pursues a southerly direction till it pierces the chain of *Mount Taurus*, where it turns to the S.E. and flowing majestically through a broad valley discharges itself into the Persian gulf about 50 miles below Bassora. After its junction with the *Tigris* it is called *Shat ul Arab*. 2. The *Tigris* is form-

ed by several branches which unite in the mountains of Armenia, and running a little east of south, passes by Mosul and Bagdad, and joins the Euphrates at Korna near lat. 31° N. after a course of 800 miles. 3. The *Kizil Irmac*, the ancient *Halys*, the principal river in Asia Minor, discharges itself into the Black sea in lon. $36^{\circ} 17'$ E. 4. The *Jordan* rises in the northern part of Palestine near mount Hermon, and proceeding in a southerly direction passes through the lake of Genesareth and discharges itself into the Dead sea.

Face of the Country.] Armenia is mountainous, and Asia Minor is also intersected in almost every direction by mountain ranges. The western part of Syria, lying along the shore of the Mediterranean, and extending 50 or 60 miles inland, is traversed by the Libanus and Antilibanus and various short branches proceeding from them. The rest of the country, extending from these mountains to the Persian border, and including the tracts watered by the Euphrates and Tigris in the lower part of their course is almost wholly a level country; and the part between the Euphrates and the Syrian mountains is a sandy desert, which extends south into Arabia, and is sometimes called the Syrian, and sometimes the Arabian desert.

Soil and Productions.] In Armenia, owing to its mountainous and elevated situation, the climate is colder than might be expected from its latitude, but the general appearance of the country is described as delightful, and the lower parts especially are diversified with extensive plains and beautiful vallies of great fertility. Asia Minor is naturally a very fertile country, but its fine plains and vallies in many parts lie uncultivated, or are merely used for pasture, but districts, formerly the loveliest and most healthy, are now covered with swamps, which corrupt the air, and where in ancient times there was a crowded population, you may now travel for miles without meeting a human being; yet wherever it is attempted the soil still produces luxuriantly the vine, the olive, the mulberry, cotton, tobacco and various delicious fruits. The same description applies to the western part of Syria, particularly to Palestine, which according to the best informed travellers displays a truly luxuriant fertility, and corresponds entirely to the description of the promised land. In Mesopotamia, or the country included between the Euphrates and the Tigris, the lands immediately on the banks of the Euphrates and along the mountains which skirt its northern border, are fertile, but the whole interior is a barren waste.

Chief Towns.] *Damascus* is situated on the east side of the mountains of Syria, in a fertile plain, amidst extensive and beautiful gardens watered by the branches of the river Barrady, which soon after terminates its course in a morass on the S. E. side of the city. It has extensive manufactures of silks and cotton goods, and was formerly celebrated for the best swords and sabres in the world, which were made of steel and iron of so fine a quality that they would bend to the hilt without breaking, but the art is now lost. The silk cloth called *damask* takes

its name from this city, as also the species of plumb called *damson*, which is a contraction of *Damascene*. The city has 200,000 inhabitants, and a very extensive commerce by means of caravans.

Aleppo is situated 234 miles N. of Damascus, in a fertile and beautiful country. It has flourishing manufactures of silk and cotton goods, and carries on an extensive commerce with Europe, Asia and Africa. Caravans loaded with goods travel between this place and Bagdad, Bassora, Mocha on the Red sea, Constantinople and various places in Persia and India. Some of the principal European nations have consuls here, and no where in the Ottoman empire are European merchants treated with greater respect. The population is variously estimated from 150,000 to 250,000.

Bagdad, once the seat of the caliphs, and one of the most populous and splendid cities in the world, is on the Tigris in lat. $33^{\circ} 20' N$. Though it retains little of its ancient splendor, it is still a city of great trade, and a noted emporium for the products of Arabia, India and Persia, which from this place are carried to Syria, Asia Minor and Constantinople. The population is estimated at 80,000.

Smyrna is a large commercial city of Asia Minor, situated at the head of a long and winding gulf of the Grecian Archipelago. It was one of the most celebrated of the ancient cities of Asia, and in modern times has been particularly distinguished for its trade, it being considered the emporium of the Levant, a term applied commonly to all the eastern coasts of the Mediterranean, particularly those of Syria and Asia Minor. Consuls from all the commercial countries in Europe reside here. The population is estimated at more than 100,000. The city is visited almost every year with the plague.

Diarbekir, in a fine fertile plain on the Tigris, in lat. $37^{\circ} 55' N$. has extensive manufactures and 100,000 inhabitants. *Mosul*, on the west bank of the Tigris, in lat. $38^{\circ} 21' N$. was formerly celebrated for the manufacture of the fine cotton goods, which from the name of the town are called muslins. It contains at present 35,000 inhabitants. On the opposite side of the river a little distance to the north, is a village which is supposed to occupy the site of the ancient Nineveh. *Bassora* is situated on the western bank of the Shat-ul-Arab, about 70 miles from the mouth of that stream, which is navigable hither by vessels of 500 tons burden. The commerce is extensive, all the Indian produce which is sent into the Turkish empire passing through the city. The population is estimated at 50,000 and is composed of a great variety of nations, such as Arabs, Turks, Armenians, Persians and some Europeans.

Angora, in Asia Minor, situated in lon $32^{\circ} 18' E$. lat. $40^{\circ} N$. is celebrated for the goats reared in its vicinity. Their fine long hair is of a silken texture, the shawls made of it rivalling those of Cashmere. The population is 50,000. *Scutari*, a large city on the Bosphorus immediately opposite Constantinople, and sometimes considered as one of its suburbs, has 30,000 inhabitants.

Tocat, 260 miles E. of Constantinople, has extensive trade and manufactures and 50,000 inhabitants. *Bursa*, 75 miles S. S. W. of Constantinople, has considerable trade and 60,000 inhabitants. *Erzerum*, the capital of Armenia, is situated in a fertile plain at the foot of a lofty chain of mountains and contains 25,000 inhabitants.

Antioch, 67 miles W. of Aleppo, on the river Orontes, which discharges itself into the Mediterranean about 20 miles below, was formerly celebrated as one of the first cities of the east. At present it contains 18,000 inhabitants. *Acre* is a strongly fortified town on a bay of the Mediterranean near the foot of Mount Carmel, in lat. $32^{\circ} 55'$ N. In 1799 it was besieged by Bonaparte with an army of 12,000 men for two months without success. The population is 15,000.

Jerusalem, the capital of the ancient Judæa, is situated 116 miles S. S. W. of Damascus in lat. $31^{\circ} 47'$ N. Under the dominion of the Turks it has been in a state of gradual decline, having been exposed both to the oppression of the Pachas and the inroads of the Arabs. It still bears some marks, however, of its ancient grandeur. From a distance it appears like a stately metropolis, presenting a magnificent assemblage of domes, towers, palaces, churches and monasteries. The most splendid edifice is the mosque erected by the caliph Omar on the site of Solomon's temple. The building, however, which excites the greatest interest among the pilgrims who resort hither, is the church of the holy sepulchre, which is 300 feet long and nearly 200 broad, and professes to comprehend within these limits the scene of all the great events of the crucifixion, entombment and resurrection of the Messiah. Jerusalem has long been the abode of numerous monks of various nations and professions, particularly Latins, Greeks, and Armenians. The manufactures of the city are almost exclusively beads, crosses, shells, and other articles supposed to derive sanctity from their local origin. The population is estimated at 20 or 30,000. *Bethlehem*, remarkable as the birth-place of our Saviour, is a village 6 miles S. of Jerusalem, and contains a monastery and about 2,000 inhabitants. *Nazareth* is a village 50 miles N. of Jerusalem, celebrated as the residence of our Saviour and his family, during the first 30 years of his life. Here also is a monastery, and the monks pretend to show the kitchen and fire-place of the Virgin Mary, the workshop of Joseph, and the precipice where Christ saved himself from the fury of the multitude. *Tyre*, whose merchants were once princes, is now a small village called *Sur* or *Sour*. It is about 20 miles N. N. E. of Acre, on a peninsula which projects from the shore in the form of a mallet with an oval head. A few remains are still to be seen of the old walls, and of a strongly fortified harbor. *Sidon*, now *Saïde*, is on the coast, about 20 miles N. N. E. of Tyre, and has 7,000 inhabitants and considerable trade, it being the port of Damascus, from which it is 55 miles distant. *Jaffa*, the ancient *Joppa*, is on the coast of the Mediterranean, 40 miles W. of Jerusalem, and is the port at which the

pilgrims to the Holy land usually first arrive. The population is about 7,000. *Ephesus*, anciently one of the most splendid cities of Asia Minor, is now a miserable village, called *Aiasuluk*, on a bay of the Archipelago 50 miles S. of Smyrna. Considerable remains of some of the public buildings are still to be seen, but the temple of Diana, the pride of Ephesus and of Asia, has not left the slightest trace of its existence. A few wretched Greeks now seek shelter here in the vaults and sepulchres.

Ruins.] *Babylon*, the great city, with its walls 60 miles in circumference, 87 feet broad, and 350 feet high, and its 100 gates of solid brass, stood on the Euphrates about 60 miles S. S. W. of Bagdad and in the immediate vicinity of Hillah. The place of this proud capital of the ancient world is marked only by four or five masses or rather mountains of bricks, earth, and rubbish piled over each other. *Balbec*, the ancient Heliopolis, celebrated particularly for its magnificent temple dedicated to the sun, is now a small village of Syria, situated in a fertile valley at the foot of Antilibanus, 40 miles N. N. W. of Damasus. The enormous size of the stones composing the walls of the temple have excited astonishment, nor could any of the mechanical expedients with which the moderns are acquainted, have put them in their present position. The stones forming the second layer are from 28 to 35 feet long and 9 deep. *Palmyra*, or Tadmor in the Wilderness, is situated in the heart of the Syrian desert 130 miles N. E. of Damascus. Its ruins exhibit the art of Greece and the opulence of Asia united, and antiquity has left nothing to be compared with them in magnificence. The principal and most entire ruin is that of the temple of the sun. This once splendid city is now inhabited by about 30 Arab families, who have built their huts in the court of the great temple.

Population, Religion and Language.] The population is estimated by Hassel at 12,000,000, of which number one half are Turks, and the rest Greeks, Armenians, Arabs, Jews, Curds, Druses, &c. The religions are more various than in European Turkey; the Turks, Arabs and Curds are Mahometans, the Greeks and Armenians are Christians; but both Mahometans and Christians are subdivided into several distinct sects. The languages are numerous, but the Turkish and Arabic are almost universally understood.

Armenians.] The Armenians are a distinct race of people inhabiting the N. E. part of Turkey in Asia and the adjacent districts in Persia. They seldom intermarry with other tribes, and profess a peculiar religion, the basis of which is Christianity. In their habits of industry, and in their disposition to migrate to foreign countries, they are not unlike the Jews. They form the chief class of traders in the Persian empire, and they are found scattered in almost all the principal cities of Asia, engaged in the most extensive commercial undertakings, and bearing a high character for integrity in their dealings.

Druses.] The Druses are a warlike race of people in Syria inhabiting the mountains of Libanus and Antilibanus and all the

coast from the parallel of 34° N. lat. to Saide in lat. $33^{\circ} 25'$. They frequently rebel against the Turkish government, and though they now acknowledge the sovereignty of the Grand Seignor, they pay only a small tribute and are almost in every respect independent under their own chiefs. Their religion appears to be a mixture of Christianity and Mahometanism. The extent of their territory is estimated at 1,200 square miles, and the population at 160,000, of whom 40,000 are capable of bearing arms.

Kurds.] The Kurds are a barbarous race of men inhabiting the country called from them Kurdistan, which embraces the eastern part of Turkey in Asia and the adjacent districts in Persia. They are bold and daring robbers, and are divided into numerous tribes, under separate chiefs, some of whom acknowledge the sovereignty of the Grand Seignor, and some are subject to the Persians, while others are wholly independent. They are about 100,000 in number, and live a wandering life, deriving their subsistence principally from their flocks and herds. In respect to religion they are partly Mahometans, and partly Nestorian Christians.

Government.] The whole of this country is nominally included within the dominions of the Grand Seignor, yet there are extensive districts in almost every part of it where the inhabitants refuse to acknowledge his authority. The Syrian desert is now completely in the possession of the Wahabees, a tribe of Arabs who carry their incursions even to the gates of Damascus; and besides the Druses, the Kurds and some other wild and wandering tribes, there are several pachas in Asia Minor and Syria who are almost entirely independent, and some of them are very powerful.

Islands.] The island of Cyprus, in the Mediterranean near the southern coast of Asia Minor, contains 8,600 square miles and is traversed from E. to W. by a high chain of mountains. It was much celebrated in ancient times for its beauty and fertility, and the soil still produces corn, excellent grapes, fine fruits, cotton &c. in the greatest abundance, but under the cruel oppression of the Turks, the island has been reduced from one of the most fertile and beautiful spots in the world almost to a desert, and the population is estimated at only 60,000.

Rhodes, lying off the S. W. coast of Asia Minor, contains 450 square miles and 20,000 inhabitants. It was anciently one of the most celebrated of the states of Greece, and distinguished above all others by its wealth, commerce and naval power. The climate is still delightful and the soil fertile and well watered, but as in Cyprus, the arbitrary exactions of its governors have reduced it to a state of the most wretched poverty. Rhodes, the capital, has two good harbors, separated by a mole and well fortified.

Samos, in the Archipelago, separated by a narrow strait from the continent, was anciently celebrated for its fertility and the excellence of its fruits, and it still produces grapes, wine and raisins in abundance for exportation. The population is variously estimated from 12 to 60,000.

Scio, lying due west from Smyrna and separated from the coast by a narrow strait, contains 500 square miles and 115,000 inhabitants, almost all of whom are Greeks. It is the best cultivated and most flourishing island in the Archipelago. *Patmos*, celebrated as the spot where St. John wrote the Apocalypse, lies a little S. W. of Samos and contains at present 3,000 inhabitants. *Tenedos* is a small island 20 miles in circumference near the entrance into the Hellespont.

RUSSIA IN ASIA.

Situation and Extent.] Russia in Asia is bounded N. by the Frozen ocean; E. by the Pacific ocean; S. by the Chinese empire, Independent Tartary, Persia and Turkey; and W. by Europe. The boundary on the side of the Chinese empire is formed principally by the Altay mountains, but in one place it runs on the south side of that chain, leaving several of the head streams of the river Amour within the Russian territory. The boundary on the side of Persia and Turkey was formerly the Caucasian mountains, but within a few years the Russians have conquered several provinces south of that chain, and the line now commences on the Black sea in about lat. 42° N. and proceeding in an E. S. E. direction terminates on the Caspian at the mouth of the Kur near lat. $39^{\circ} 30'$ N. Russia, therefore, now embraces the provinces of Georgia, Daghestan and Shirvan, taken from Persia, and Mingrelia and Imiretta, taken from Asiatic Turkey. It extends from $30^{\circ} 30'$ to 76° N. lat. and from 37° to 192° E. lon. The area is estimated at nearly 5,000,000 square miles.

Divisions.] This part of the Russian empire is divided into six governments, the estimated extent and population of which are given in the following table.

Governments.	Square miles.	Population.	Pop. on a sq. m.
Astrachan,	69,000	383,000	7
Caucasus,	57,000	119,000	2
Georgia,	19,000	300,000	15
Orenburg,	123,000	645,000	5
Tobolsk,	1,878,000	800,000	$\frac{1}{2}$
Irkutsk,	2,800,000	450,000	$\frac{1}{8}$
Total,	4,946,000	2,697,000	$\frac{1}{4}$

The governments of Tobolsk and Irkutsk, embracing the whole country east of the Ural mountains, are usually called *Siberia*. It covers a greater extent of territory than the whole of Europe, while the population hardly exceeds 1,000,000.

Mountains and Lake.] The principal mountains are the *Altay chain* on the southern boundary, the *Ural mountains* in the west, and the *Caucasian mountains* between the Caspian and the Black sea. The principal lake is lake *Baikal* in the government of Irkutsk. It is 360 miles long, from 20 to 50 broad, and after receiving the waters of the Selenga and several other rivers which rise in the Chinese territory, discharges itself through the Lower Angara into the river Enicei or Jenisey.

Rivers.] The three largest rivers are the *Oby*, the *Enicei* or *Yenisey* and the *Lena*, all of which discharge themselves into the Arctic ocean, after having traversed the whole breadth of Siberia, from south to north. The principal tributary of the Oby is the *Irtish*, which joins it near lat. 61° N. after having received the *Issim* and the *Tobol*. The *Kovyma* is a large river, which falls into the Frozen ocean near lon. 163° E.

The other considerable rivers are, 1. The *Kuban*, which rises on the north side of the Caucasian mountains, and discharges itself through many mouths partly into the sea of Azoph and partly into the Black sea. 2. The *Kur*, which rises on the south side of the Caucasian mountains, and discharges itself into the Caspian after forming for some distance the boundary between Russia and Persia. 3. The *Volga*. 4. The *Oural* or *Ural*, which rises in the Ural mountains in about 54° N. lat. and falls into the Caspian east of the Volga.

Face of the Country.] The feature which is most strikingly characteristic of this region is the steppes or vast level plains, which cover the principal portion of its surface. In their extent and the dead uniformity of their aspect, they resemble the deserts of Arabia and Africa, but differ entirely as to the nature of the soil which is marshy, covered with long rank grass and aquatic shrubs, and filled with innumerable saline lakes. The steppe of Issim, in the S. W. part of Siberia, extends across the heads of the Tobol, the Issim and the Irtish, along the foot of the Altay mountains. Connected with this, and reaching from the Irtish to the Yenisey, is another vast steppe of a very dreary aspect. It is almost entirely covered with marshes, and tenanted only by a few wretched natives, who reside in houses half sunk in the ground, and employ themselves in hunting. Still more dreary is the vast northern steppe, which extends between the Lower Oby and the Lower Yenisey. Its marshy plains consist of mud, almost constantly frozen. The countries from the Yenisey to the Lena and from the Lena to the Kovyma are also considered as steppes although the level is interrupted by some inequalities in the surface. The governments of Astrachan and Orenburg, on the west of the Ural mountains, consist also principally of vast plains or steppes, abounding with salt lakes, from which large quantities of salt are manufactured.

Climate and Soil.] The northern part of Siberia lies in the frigid zone, the southern frontier is skirted by lofty mountains, while the intermediate district lies sloping towards the north. As might be expected, therefore, the cold is intense; eternal winter banishes all vegetation from the northern half of the country, except a few dwarfish oaks, and plants of the most hardy character; and the southern half is also a barren and inhospitable region, except a few favored districts, lying at the foot of the mountains. An extensive tract around lake Baikal for example, and for some distance to the west, has a luxuriant soil, favorable to the growth of oats, barley and rye, but it is principally devoted to pasturage. The countries on the head waters of the Tobol and of the Issim are very fertile and form the granary of the governments of Tobolsk, Perm and Orenburg. The environs of several of the large towns are also favorable to pasturage, and to the inferior species of grain.

Minerals.] Siberia is very rich in minerals. The Ural mountains contain extensive mines of iron and copper with some of gold, for the working of which considerable establishments have been formed. Katharinenburg, in the government of Perm in European Russia, forms the centre of all the foundries and forges in these mountains. The great scene of mining operations in the Altay chain is the Schlangenberg or Serpent mountain, situated about 60 miles from the Irtysh and 100 from the Ob. It may be considered as an enormous mineral mass; wherever its covering of slate rock is taken off, all the substances beneath are found to yield gold, silver, copper and plumbago. Zinc, arsenic and sulphur are also abundant. Between 1749 and 1771 it produced 12,348 pounds of gold, and more than 324,000 pounds of silver. It still yields annually 36,000,000 pounds of mineral of every description; and the veins already discovered will supply the same quantity for 20 years. The mines of Nertschink, on the south side of the Altay chain, yield lead mixed with silver.

Animals.] This bleak country, almost deserted by man, is covered with the *elk*, the *martin*, the *sable*, the *beaver* and the *ermine*, animals protected from the cold with a covering of rich and beautiful fur, which is eagerly sought after for purposes of comfort and luxury, and hence these frozen regions have become the seat of an extensive fur trade. The *rein-deer* is also found in most parts of Siberia, and supplies its wild inhabitants with food, milk and clothing, and conveys them with rapidity in sledges over the snow. The most formidable tenant of this part of the world is the bear, and many ingenious methods are used to destroy him. Sometimes they lay a rope in his path, with a heavy block at one end and a noose at the other, contrived in such a way that the bear becomes entangled, and then is either exhausted in dragging so great a weight, or attacking the block with fury, he throws it down some precipice, where it seldom fails to drag him after it to destruction.

Curiosity.] One of the most remarkable curiosities is the remains of huge animals, none of which are now found alive in Si-

beria. The bones of the elephant and rhinoceros occur in vast quantities, not only in the southern regions but in the isles of the Frozen ocean. Several entire carcasses have also been found of the mammoth, that extraordinary animal, no longer found alive in any part of the world, but which surpasses in bulk every other species of land animal.

Chief Towns.] *Astrachan*, the largest town, is situated on an island in the Volga, 52 miles from its mouth. It is a place of great trade, and has extensive manufactories. Immense quantities of sturgeon and other fish are also caught in the vicinity. The population, consisting of Russians, Armenians, Greeks, Tartars, Persians, Jews, Hindoos, English, French, &c. is variously estimated from 30 to 70,000.

Tiflis, the capital of Georgia, is on the Kur, in lat. $41^{\circ} 43' N.$ lon. $45^{\circ} E.$ It carries on considerable trade with Persia, and has 18,000 inhabitants, half of whom are Armenians.

Baku, in the province of Shirvan, is on a promontory which juts out into the Caspian, and its harbor is one of the best in that sea. The country around Baku yields large quantities of naphtha, which is collected in wells by the natives and used as a substitute for lamp oil. The earth seems here to be deeply impregnated with inflammable matter, and the city was formerly much resorted to by the Guebres or fire worshippers of Persia, who built various temples of stone, in one of which a blue lambent flame issued from a large hollow cane near the altar, and this the devotees of that sect believed would last till the end of the world.

Orenburg, on the river Ural, 250 miles N. E. of Astrachan, is the great throughfare from Siberia to European Russia and a place of considerable trade. The country around is inhabited by numerous Tartar tribes. Population 21,000.

Tobolsk, situated at the junction of the Tobol and the Irtysh, is a place of considerable trade. Here is the general magazine for the furs paid by the various tribes of Siberia as a tribute to the Russian government. The population is 16,000.

Irkutsk, situated at the junction of the Irkut and the Angara, in lon. $103^{\circ} 30' E.$ lat. $52^{\circ} 16' N.$ is a place of great commercial importance, being the residence of many merchants engaged in the trade between Russia and China, which is carried on at Kiachta. It contains about 20,000 inhabitants.

Kiachta, the centre of all the trade carried on between the Russian and Chinese empires, is situated on the southern frontier of Siberia, 330 miles S. of Irkutsk, and within a stone-cast of the Chinese city of Maimatshin. The great fair is held in December, when merchants flock hither from every part of the Russian empire. They bring cloths, furs, Russia and morocco leather, and receive in exchange nankeens, silk stuffs, tea, rhubarb, &c. The town contains 150 houses.

Okhotsk, the centre of the trade with Kamtschatka and Russian America, is situated on a long narrow peninsula included between the river Okhota and the sea of Okhotsk. It contains 2,000 inhabitants.

Tomsk, on the Oby, at the junction of the Tom, has considerable trade and 11,000 inhabitants. *Barnaul*, a mining town, and the centre of all the forges and foundries in the Altaian mountains, is situated near the junction of the Barnaul and the Oby, 100 miles S. E. of Kolhyvane. *Yeniseisk*, on the Yenisey, has 8,000 inhabitants, and a famous fair which is frequented by merchants from every part of Siberia. *Yakutsk*, on the Lena, has 3,000 inhabitants and a flourishing fur trade.

Population.] The number of inhabitants is estimated at about 2,700,000. The mass of the population in Siberia consists of the native tribes, who are subject to the Russian government, but on whom the yoke presses very lightly, they being merely obliged to pay a certain tribute annually. These tribes are numerous and wholly dissimilar to each other. The tracts in the south and east are occupied by the Mongols, and by the Burats, a nation of the same race. They exhibit the same features and follow the same pursuits with the rest of their nation who inhabit the vast regions of Central Asia. These tribes inhabit the banks of the Selenga, of the lake Baikal, and of the Upper Yenisey. The southern parts of the government of Tobolsk are filled by various tribes of Tartars who subsist principally by pasturage, particularly by the rearing of horses. The northern districts are possessed by hunting tribes, peculiar to itself, not found in any other part of Asia. The principal are the Tungouses upon the Yenisey, the Ostiaks upon the Oby, the Yakoutes upon the Lena, the Samoieds upon the whole northern coast eastward to the Lena, the Tchoutchis at the N. E. extremity of Asia. The European inhabitants of Siberia consist almost exclusively of the troops occupying a series of fortified posts, scattered at wide intervals over this vast dominion, and the descendants of those unhappy persons who were doomed, by the government, to exile in these dreary regions.

Religion.] The religion generally diffused throughout this territory consists of that widely extended system of Boodh. or of the Lamas, which has its central seat in Tibet, but is generally professed over all the east and centre of Asia. It is here called Shamanism. On the Upper Selinga, to the south of lake Baikal, is the residence of the Bandida Lama, the pope or head of the religion in this part of Asia. Christianity has hitherto made very little progress among the natives of Asiatic Russia; though considerable efforts have recently been made, and with some success, both by the Russian government and the British missionary societies.

Commerce.] The commerce of Siberia consists chiefly of two branches. The first is formed by the exportation of its metals and furs; the second is a mere transit trade, consisting in the overland intercourse of Russia with the Chinese empire. The former is in a great measure in the hands of the government, who have monopolized the most valuable mines, and to whom the tribute of all the wandering tribes is paid in furs.

Inland Navigation.] Notwithstanding the course of the great rivers is from south to north, the merchants carry on a navigable intercourse from west to east, with very few interruptions, across the whole of Siberia. Soon after crossing the Ural mountains they descend the Tobol to Tobolsk; then descend the Irtysh to its junction with the Oby, and then by ascending that river and one of its tributaries, they come almost to Yeniseisk. After a short land carriage they embark on the Yenisey, and by the Tungouska and Angara are conveyed to Irkutsk. A short land carriage then places them upon the Lena, which they descend, till a little below Yakutsk they find a tributary which conveys them to the foot of the Stanovoy mountains; after the laborious passage of which, they find a small river, which transports them to Okhotsk, on the shore of the sea of the same name. The merchants trading to China follow the same route, as far as Irkutsk; thence they cross the lake of Baikal, and ascend the Selenga to Kiachta, the theatre of this commerce.

Kamtschatka.] Kamtschatka is a large peninsula forming part of the government of Irkutsk, and lying between the Pacific ocean on the east and the sea of Okhotsk on the west. It is traversed through its whole length from N. to S. by a chain of lofty mountains. The number of inhabitants by the last census was only 2,843. They live almost exclusively by fishing and hunting. Instead of rein-deer they use dogs to draw their sledges over the snow and ice.

Islands.] The *Aleutian* islands are about 40 in number, and extend in the form of a bow from the peninsula of Kamtschatka to that of Alaska in North America. The inhabitants are few in number and subsist principally by fishing and hunting. The *Kurile* islands extend in a S. W. direction from the southern point of Kamtschatka to the isle of Jesso, which belongs to Japan. Several of the islands at the southern extremity of the group are subject to the Japanese. The population of the whole is said not to exceed 1,400.

ARABIA.

Situation and Extent.] Arabia is bounded N. by the pachalics of Bagdad and Damascus in Asiatic Turkey; E. by the Persian gulf; S. by the Indian ocean; and W. by the Red sea. It extends from 12° to 34° N. lat. and from 33° to 59° E. lon. The area, according to Arrowsmith's chart, is 1,030,000 square miles.

Divisions.] Arabia was divided by the ancients into three parts; *Arabia Felix*, or Happy Arabia, comprising the southwestern part of the country, bordering on the Indian ocean, and on the southern part of the Red sea; *Arabia Petroea*, lying on the Red sea north of Arabia Felix; and *Arabia Deserta*, much the largest division, embracing all the eastern and northern part of the country. These names are still in common use among Europeans; the natives, however, divide the country into five parts, as follows, 1. *Yemen*. 2. *Hedysjar*. 3. *Oman*. 4. *Lachsa*. 5. *Nedsjed*. The first of these seems to correspond with Arabia Felix; the second with Arabia Petroea, and the three last with Arabia Deserta.

Face of the Country.] Arabia is an arid desert interspersed with a few fertile spots, which appear like islands in a desolate ocean. Stony mountains and sandy plains form the prominent features in the surface of this vast peninsula. To the north it shoots out into a very extensive desert, lying between Syria and the countries on the Euphrates. The whole coast of Arabia, from Suez to the head of the Persian gulf, is formed of a plain called the Tehama, which presents a picture of the most complete desolation. The interior is diversified by extensive ranges of mountains, but there is no river of any consequence in all Arabia, almost every stream either losing itself in the sandy plains or expanding into moors and fens.

Climate.] In the mountainous parts the climate is temperate, but in the plains intolerable heat prevails. A hot and pestiferous wind, called the Simoom, frequently blows over the desert and instantly suffocates the unwary traveller; and whole caravans are sometimes buried by moving clouds of sand raised by the wind. In almost every part of the country they suffer for want of water.

Soil and Productions.] The soil, wherever it is well watered, exhibits an uncommon fertility, but where this is not the case it degenerates into a waste, affording barely a scanty support to a few wild animals and the camels of the wandering Arabs. The most fertile district is Yemen or Arabia Felix, which in many parts is cultivated like a garden. The principal productions are coffee, myrrh, aloes, frankincense, pepper, and tropical fruits.

Animals.] The camel and the horse are produced in greater perfection in Arabia than in any other country. The camel is wonderfully fitted by Providence for traversing the hot and parched desert. His stomach is formed for the retention of a large supply of water, and he is thus enabled to travel for six or eight days without drinking. His feet are made of a hard fleshy substance, well fitted to resist the heat of the sand. The ordinary pace of the camel employed in caravans is slow; being at the rate of two or three miles an hour for seven or eight hours in a day. He usually carries 300 pounds on his back, which is not taken off during the journey: when weary he kneels down to rest, and sleeps with his load upon his back.

The Arabian horses have been celebrated in all ages. They are remarkable for speed, admirably adapted for battle, very

sprightly, full of fire, and they never appear fatigued ; they are besides extremely docile. Nothing can exceed the care taken by the Arabs in training their horses, and very particular attention is paid to the purity of the breed. Their pedigree is counted as carefully as that of their masters, being often traced as far back as 2,000 years. A horse of high birth will sell for a thousand crowns.

Chief Towns.] *Mecca*, celebrated as the birth-place of Mahomet, is situated in a dry, barren, and rocky country 40 miles inland from the Red sea, in lat. $21^{\circ} 18' N$. It is entirely supported by the concourse of pilgrims from every part of the Mahometan world. The chief ornament of Mecca is the famous temple, in the interior of which is the Kaaba or house of the prophet, a plain square building built of stone. The most sacred relic in the Kaaba is the stone said to have been brought by the angel Gabriel to form the foundation of the edifice. The grand ceremony through which pilgrims pass is that of going seven times round the Kaaba, reciting verses and psalms in honor of God and the prophet, and kissing each time the sacred stone. They are then conducted to the well of Zemzem, situated in the same part of the temple, where they take large draughts, and undergo a thorough ablution in its holy waters. Another ceremony, considered as of equal virtue, is the pilgrimage to Mount Arafat, situated about 30 miles to the south of the city. The population of Mecca was formerly estimated at 100,000, but is now reduced to 16,000 or 18,000, the resort of pilgrims within a few years having greatly diminished. Jidda on the Red sea serves as the port of Mecca.

Medina, 176 miles N. of Mecca, is celebrated as containing the tomb of Mahomet, around which 300 silver lamps are kept continually burning. The population is 6,000. *Jambo* on the Red sea is the port of Medina.

Mocha, situated near the southern extremity of Arabia, is the principal port on the Red sea, and the channel through which almost all the intercourse of Europe with this part of the world is carried on. The great article of export is coffee, which is celebrated as the finest in the world. The population is estimated at 5,000.

Sana, the capital of Yemen, is a handsome city situated 128 miles N. N. E. of Mocha.

Mascat, the principal port on the eastern coast, carries on an extensive trade with the British settlements in India, the Malay peninsula, the Red sea, and the eastern coast of Africa. It is under the government of an independent chief. The Arabs of Mascat are considered fine sailors, and their power at sea was at one time so formidable, and exercised in so piratical a manner, as to give serious alarm to the English. Of late, however, they have become quite civilized and orderly, and Europeans are now treated here with more respect than in any other part of Arabia.

Curiosities.] Near the head of the Red sea, 150 miles S. E. of Suez, is *Mount Sinai*, where God delivered to Moses the ten commandments, and immediately west of it is *Mount Horeb*, where the

angel appeared in the burning bush. These mountains are now inhabited by monks, who pretend to show the very spot where the miracles happened.

Population.] The number of inhabitants is commonly estimated at 10 or 12,000,000. They are almost exclusively Arabs, a part of whom dwell in towns and villages, but the greater number are migratory.

Bedouins.] The wandering Arabs of the desert are called Bedouins. They all live under tents, and migrate with their families and property from place to place in quest of subsistence. Many tribes are notorious robbers, and without a sufficient force, or a passport from one of their chiefs, it is dangerous to pass through any territory occupied by them. The rights of hospitality, however, are held in sacred observance, and an asylum once granted proves a security to the most defenceless. These predatory tribes are dispersed through the deserts in various parts of Asia and Africa, and are dreaded by all the civilized people around them.

Language.] The prevailing language is the Arabic, which is one of the most extensively diffused languages in the world. It is spoken not only in Arabia, but in Syria, Persia, Tartary, part of India and of China, half of Africa, and on all the coast of the Mediterranean.

Mahometanism.] Arabia was the birth-place of Mahomet and is still the centre of his religion. Every true Mahometan believes that there is one God, and but one, and that Mahomet is his prophet. He says his prayers five times every day; at day break, at noon, middle of the afternoon, at sun-set and at twilight; he abstains from pork and spiritous liquors; at one season of the year he neither eats, drinks nor smokes between sun-rise and sun-set, for 30 days in succession; and once in his life he performs a pilgrimage to Mecca.

Wahabees.] The Wahabees are a new sect of Mahometans, who originated about the middle of the last century, and acknowledge Abdoul Wahab as their founder. They believe in the unity of the Deity and the genuineness of the koran, but reject all the traditions and all the worship paid to saints and the successors of Mahomet. The most memorable era in their history was in 1803, when they entered Mecca and destroyed 80 splendid tombs, erected in honour of the descendants of Mahomet. In 1804 they took Medina, and these two holy cities continued for a long time in their possession. They are now masters of all the interior of Arabia and of parts of the sea coast, and are supposed able to muster an army of 120,000 men. Within a few years, however, the Turkish pacha of Egypt has succeeded in expelling them from Mecca and Medina.

Government.] Arabia is divided among a number of independent tribes or clans, each governed by its own chief, called an emir or sheich, and confederacies are often formed for mutual defence. The city of Mecca is, however, acknowledged at present the sovereign

Seignor, and the late rise of the Wahabees has united the whole interior of Arabia under one religious and military head, though it has probably left unaltered the division into clans and the independence of the separate chiefs.

Arts and Sciences.] The arts are universally in the lowest stage. A modern traveller declares that in Mecca, which may be considered the capital city, no person could be found capable of making a lock or a key. Even the slippers and sandals used there, are brought from Egypt and Constantinople. There is not a single man who knows how to engrave an inscription or any kind of design on hewn stone. The sciences also are entirely neglected. Education is limited to reading and writing and even these acquirements extend only to a few.

Caravans.] The inland trade of Arabia, Persia, Turkey, Tartary and Africa is carried on principally by caravans, consisting of large companies of merchants, travellers and pilgrims, who march with their camels over the sandy deserts, carrying their water and provisions with them. They go armed, and travel in company to defend themselves from the wandering Arabs. This mode of travelling and trading has subsisted from the earliest antiquity, for it was to a caravan that Joseph was sold by his brethren.

Islands.] The *Bahrein* islands in the Persian gulf, near the coast of Arabia, in lat. 27° N. are famous on account of the extensive pearl fishery, carried on upon their shores.

INDEPENDENT TARTARY.

Situation and Extent.] Independent Tartary is a part of central Asia, extending from the Belur Tag mountains to the Caspian sea, and bounded N. by Russia; E. by the Chinese empire; and S. by Cabul and Persia. Very little is known about this country, it having been seldom visited by Europeans in modern times. The area is variously estimated from 600,000 to 1,000,000 square miles.

Face of the Country.] The northern part of the country is an immense desert extending into Russia; the western part, lying between the Oxus and the Caspian, is also a desert called the desert of Karasm. The district in the S. E. extending from the Belur Tag mountains to the sea of Aral and watered by the Oxus, the Sihon and their numerous tributaries, was well known to the

ancients for its delightful climate, its fertile soil, and dense population. The Arabian geographers describe it as the paradise of Asia, and are never weary of expatiating in its praise. It is represented as filled with splendid cities, and the populousness is said to be such, that an army of 300,000 horse and the same number of foot could be drawn from it, without the country suffering by their absence. This tract is now called Great Bukharia. It has been touched by modern travellers only at a few points, and even the names of most of the cities mentioned by the Arabian geographers are wholly unknown to the moderns.

Rivers.] The *Oxus* or *Amu* rises in the S. E. part of Great Bukharia, and flowing in a N. W. direction, receives numerous tributaries and falls into the sea of Aral after a course of 1,200 miles. It has been generally believed that this river fell anciently into the Caspian sea, and was turned artificially into its present receptacle, but this opinion seems now to be abandoned by the best geographers. The *Sihon* or *Sir*, the ancient *Jaxartes*, falls into the sea of Aral on its eastern side after a N. W. course of 600 miles, during which it receives numerous tributaries.

Chief Towns.] *Samarcand*, an ancient and celebrated city, once the residence of the famous Tamerlane, is on the Sogd, a branch of the *Oxus*. It is famous among the Mahometans as a seat of learning, and is resorted to from all the neighboring countries. It has manufactures of leather, cottons and silks, and carries on an extensive commerce with Persia, Hindoostan and the Chinese dominions.

Bokhara, also on the Sogd, 50 miles from its mouth and 100 W. of Samarcand, has a celebrated school for the study of Mahometan theology and law. It is said to contain 100,000 inhabitants.

Inhabitants.] The number of inhabitants is variously estimated from 2,000,000 to 5,000,000. They consist principally of two nations of Tartars, the Kirgees or Kirghises in the north, and the Usbecks in the south. The *Kirghises* are divided into three hordes, called the Little, the Middle and the Great Horde. The *Kirghises* of the Little Horde occupy the most westerly position, and wander over the plains east of the river Ural, and between the Caspian and the sea of Aral. They bring their flocks in summer to the Steppes between the Ural and the Volga. The Middle Horde live farther to the east, in vast plains to the north of the Aral. These two hordes subsist entirely on their flocks. The *Kirghises* of the Great Horde are established in the country east of the Aral, on the banks of the *Sihon* and its tributaries. Some of them are pastoral, but the greater number, inhabiting fertile, mild and well watered countries, devote themselves to agriculture. The Little and Middle Hordes acknowledge themselves subjects of the emperor of Russia. The Russians, however, do not exact from them even the smallest tribute; on the contrary they pay regular pensions to all the principal chiefs, to prevent them from plundering on the Russian frontier. This, however, has not proved sufficient, and Russia has been obliged to construct

a chain of fortresses, from the Ural along the Tobol and the Irtish as far as the Irtysh. The Kirghises of the Great Horde have few connections with the Russians.

The *Usbecks* are the ruling people in Great Bukharia and all the southern part of Tartary. They are reputed the most civilized of the Mahometan Tartars. Still, however, they are devoted to a pastoral life, and are generally more addicted to warfare and predatory habits than to agriculture and the arts.

PERSIA.

Situation and Extent.] The name of Persia has been commonly applied to the whole country included between the Tigris on the west and the Indus on the east, and extending from the Persian gulf to the Caspian sea and the Caucasian mountains; but the eastern part of this territory has for some time been included in the new kingdom of Cabul and the independent state of Beloochistan, while Russia has conquered several of the Persian provinces lying at the foot of the Caucasian mountains, and the Turks and Kurds occupy a narrow tract on the east of the Tigris. Persia, therefore, is now bounded N. by the Russian provinces in the Caucasus, the Caspian sea and Independent Tartary; E. by Cabul and Beloochistan; S. by the Persian gulf and W. by Turkey in Asia. It extends from 26° to 41° N. lat. and from 44° to 61° 40' E. lon. The area is estimated by Hassel at about 480,000 square miles.

Divisions.] Persia is divided into the following provinces; 1. Azerbijan. 2. Erivan or Persian Armenia. 3. Ghilan. 4. Mazanderan. 5. Irak. 6. Khuzistan. 7. Fars. 8. Laristan. 9. Kerman. 10. Khorasan.

Mountains.] A range of mountains, called by the ancients *Zagros* and by the Turks *Tag Aiağa*, leaves the Mount Taurus chain a little west of lake Van, and running in a S. E. direction through the western provinces of Persia, terminates on the Persian gulf near the straits of Ormus. Another range connected with the Caucasian and Mount Taurus chains, proceeds under the name of *Elwind* or *Elbruz* along the western and southern shores of the Caspian sea, and then taking an easterly direction connects itself, it is supposed, with the Parapomisan mountains, and through them with the Hindoo Coosh and Himmaleh. Both these ranges are very lofty; Mount Demavend, the loftiest peak in the Elbruz chain, rises to the height of more than 10,000 feet above the level of the sea.

Face of the Country.] The northern and western frontiers are skirted by lofty chains of mountains, as already mentioned, but the interior consists of an immense, dry, salt plain. Persia suffers for want of water. There is no considerable river in the whole country; the streams which rise in the mountains, after a short course, either falling directly into the sea or losing themselves in the desert.

Soil and Productions.] The mountain streams produce all the fertility of which the empire can boast, and render the plains and vallies through which they flow beautiful and luxuriant in an extraordinary degree. The plain of Shiraz is the pride of Persia and almost of the east; that of Ispahan is also celebrated. The provinces on the Caspian, watered from the great chains of Caucasus and Elbruz, are of very remarkable fertility. The principal productions are the vine, the mulberry, the sugar cane and fruits and grains of various kinds. The wine of Shiraz is considered superior to any other in Asia, and that produced on the declivities of the Caucasian mountains is also highly esteemed. A large portion of the empire, however, is abandoned to pasture, and tenanted by wandering shepherds, like those of Tartary and Arabia. Territories which were formerly distinguished for fertility, are now rendered wholly unfit for culture, in consequence of those artificial canals which supplied them with the necessary moisture having been suffered to dry up. The salt with which the soil and waters are everywhere impregnated, has often accumulated and formed a species of crust on the surface of the ground, so as to render it capable of producing only soda and other saline plants. The province of Khuzistan, in the S. W. which was formerly the seat of powerful dynasties, is now scarcely distinguishable from the desert tracts by which it is surrounded. The centre and south of Persia are entirely destitute of trees, a defect arising from its aridity, and having a constant tendency to increase it.

Climate.] The climate is very various. In the mountainous districts the winters are very severe, while the inhabitants of the southern plains suffer in summer from excessive heat. The mildest districts are the provinces on the Caspian where the southern fruits grow in perfection, which are rare in other parts of Persia. The most unhealthy districts are along the shore of the Persian gulf, where the simoom blows over the parched fields.

Chief Towns.] *Ispahan*, the largest city and long celebrated as one of the most splendid in the east, is situated on the river Zenderoud in lat. $32^{\circ} 25' N.$ lon. $52^{\circ} 50' E.$ When visited by Chardin at the beginning of the last century it was estimated to contain 600,000 inhabitants, and there were numerous superb edifices, particularly the royal palace, which was five miles in circuit including the gardens, and is said to have surpassed every thing of the kind which is to be found in Europe; but the city is now merely the wreck of what it formerly was, and a person may ride for miles amid its ruins. It is still, however, a great

Ferdusi and Sadi, being classic even in Europe. The late distractions of the kingdom have diminished the number of students at the colleges, but poetry is still cultivated with the same enthusiasm as ever.

Government.] The government is an absolute despotism. The shah or king has always been considered the vicegerent of the prophet, and entitled to the most implicit obedience. He is absolute master of the lives and property of his subjects; and the first man in the kingdom may at his command be instantly stripped of his dignities and publicly bastinadoed. The wandering tribes, however, are ruled by their own khans, who are independent in the management of their internal concerns, and merely pay military service when required.

Army.] Persia has scarcely any thing which can be called a standing army. The most efficient force consists of the royal slaves, 3,000 in number, a considerable part of whom have recently been disciplined after the European manner. The royal guards, 10,000 in number, are merely a body of militia, who have lands assigned them around the capital, and are ready to be called out at a moment's warning. The Shah's main dependence, however, is on the khans of the wandering tribes, who can furnish by a great effort an army of 150,000 or 200,000 men. It consists entirely of cavalry and receives no regular pay, but in return has ample license to plunder.

Manufactures.] The Persians excel in many manufactures, particularly in works of ornament and splendor. Those rich carpets which we call Turkey, from the channel by which we receive them, are manufactured by the Iliats or wandering tribes in the plains of Persia. The Persians excel particularly in brocade and embroidery. Porcelain, nearly equal to that of China, and shawls, similar though inferior to those of Cashmere, are also enumerated among the manufactures of Persia.

Commerce.] Trade in this empire is at a very low ebb. It has no port on the Persian gulf except Bushire, and the small marine which it once maintained there is entirely annihilated. The Caspian never was, and never can be the seat of any extensive trade; since, besides its difficult navigation, the only country with which it affords a communication is Russia. Even this channel is nearly closed by the attitude of habitual hostility in which the two powers are now placed towards each other. The principal commerce of Persia, therefore, is carried on by caravans with Turkey on one side, and Tartary and India on the other.

CABUL.

Situation and Extent.] Cabul or Cabulistan is bounded N. by Independent Tartary, from which it is separated by the Hindoo Coosh and Parapomisan mountains; E. by Hindoostan, from which it is separated by the Indus; S. by Beloochistan; and W. by Persia. Besides the country included within these boundaries, the province of Balk in Tartary, Cashmere and several other countries on the east of the Indus, and a part of Beloochistan are in a greater or less degree dependent on the king of Cabul. In its greatest extent the kingdom stretches from 24° to 37° N. lat. and from 60° to 77° E. lon. and contains according to Hassel more than 300,000 square miles.

Face of the Country.] The Hindoo Coosh and Parapomisan mountains run along the whole northern frontier. The Hindoo Coosh is a very lofty range, many of its summits being covered with perpetual snow, and some of them are scarcely inferior in height to those of the Himmaleh range. A branch of the Hindoo Coosh, called the ridge of Solimaun, proceeds in a southerly direction and sinks gradually into the plains of Sinde, at the mouth of the Indus. These two ranges, with branches striking off from them, traverse nearly the whole kingdom, except the tracts near the southern and western frontiers which are occupied by vast plains and sandy deserts.

Rivers.] The *Indus* is the principal river and forms the natural boundary on the side of Hindoostan. It receives very few important tributaries from this country. The largest is the *Cabul*, which rises in the mountains of Hindoo Coosh and passing by the city of Cabul joins the Indus at Attock. The *Helmond* waters the western part of the kingdom, and falls, beyond its frontier, into the lake of Zerrah or Durra.

Climate.] The climate exhibits the most striking varieties, in consequence of the abruptness with which the mountain ranges often rise from the deep plains beneath. A few hours journey carries the traveller from a place where snow never falls to another where it never melts. In some of the plains persons are often killed by the intensity of the hot wind, while regions of eternal ice are towering above.

Soil and Productions.] The soil is nearly as various as the climate. In well watered plains of moderate elevation, as those of Peshawer and Candahar, it is exceedingly fertile and produces two crops in the year. The loftier part of the mountain chains is of course condemned to perpetual ruggedness and sterility, while in the level districts of the south and west extensive deserts are produced by the absence of water. Agriculture is followed with assiduity. The grand process upon which its success depends is that of irrigation, which is practised in every part of

the kingdom. Wheat and barley are the staple productions. Fruits and vegetables of various kinds are also abundant.

Chief Towns.] *Cabul*, the capital and residence of the Shah, is on the river of the same name. It is a place of great trade, being resorted to by the Hindoos, Tartars, and even the Chinese. The population is estimated at 200,000.

Peshawur, 150 miles E. of Cabul, is situated on several small streams which fall into Cabul river a few miles north of the city. It is occasionally the residence of the king and court, and is inhabited by persons from all parts of the east. The population is estimated at 100,000.

Candahar, situated on the Helmond, in lat. 33° N. lon. 65° 30' E. is a large town, well fortified, and standing on the great road between Persia and India, has a flourishing trade.

Herat is situated also on the high-road from Persia and Tartary to Hindoostan, and the route of all the caravans from time immemorial has passed through it; but it has also been on the route of all the invading armies, and has been often plundered and burnt. The king of Persia has recently sent an army against it. *Ghizni*, formerly the capital of a powerful empire extending from the river Ganges to the borders of Persia, has now a small population and scarcely retains a vestige of its former grandeur. *Balk*, a very ancient town on a branch of the Oxus, 250 miles N. E. of Hérat, has 6,000 inhabitants.

Population.] The population of the kingdom and its dependent territories, according to Elphinstone, is 14,000,000, of which number 4,300,000 are Afghans, 1,400,000 Belooches, 1,200,000 Tartars, 1,500,000 Tadschiks and Parsees, and 5,700,000 Hindoos. The Tadschiks are a mixture of Persians and Arabs, and constitute the settled population of Persia and of a great part of Cabulistan. The Parsees or Guebres are fire-worshippers, who in the seventh century were expelled from Persia, their original country, by the Mahometans, and found refuge in Cabulistan and Hindoostan, where they live in a very quiet, inoffensive manner, and have become quite wealthy by the industry and sagacity with which they prosecute commercial concerns.

Religion.] The Hindoos remain true to the religion of their native country. The Parsees have a religion of their own. They worship one supreme being, but reverence the sun, stars and fire as symbolical of him. Zoroaster is their law-giver and the Zendavesta their law-book. All the other classes of the population are Mahometans; the Afghans and Belooches are of the Soonly sect, but the Tadschiks are Schiites.

Government and Army.] The Afghans are the ruling people, and the khan of their principal tribe is the king of the whole country. The government, however, is by no means of that simple structure which is usual in Asiatic monarchies. Over the great towns, indeed, and the country in their immediate vicinity, the authority of the sovereign is direct and almost supreme, but the rest of the nation is divided into tribes, each under its own khan, who is nearly independent. Alliances are formed and

wars carried on by the different tribes between themselves, without any concern or interference of the sovereign. This form of government keeps every part of the country in a state of continual tumult and ferment. The army of the king is estimated at 150,000 or 200,000 men, principally cavalry, but his ability to raise this number depends on the co-operation of the different tribes.

Character.] The Afghans are in general a stout, well made people, of a swarthy complexion, brave, generous and sincere. Hospitality is a virtue for which the nation is eminently distinguished. Not only a stranger, but the bitterest enemy, beneath the roof of an Afghan, is in perfect security. Yet with this courtesy and humanity, are combined almost universally habits of plunder and robbery. The extent of these practices varies among different tribes, and in those placed under the immediate eye of the sovereign they are much restrained; but in the heights of the Solimaun ridge of mountains the tribes are all robbers, and some of them little better than savages. The Tadschiks are the most cultivated part of the population, and pay as much attention to literature as the same race in Persia.

BELOOCHISTAN.

Situation and Extent.] Beloochistan is bounded N. by Cabul; E. by Hindoostan; S. by the Indian ocean; and W. by Persia. The area is estimated at 176,000 square miles.

Face of the Country.] Until the late visit of Mr. Pottinger this country had not been traversed by Europeans since the rash and perilous return of Alexander the Great. It appears to be covered with numerous rugged chains of mountains, separated from each other by sandy deserts. The mountains are very lofty, but do not bestow on the country their usual gift of fertilizing moisture. In a journey through the whole length of the country from east to west Mr. Pottinger never met a stream which would take a horse above the knee. The beds of mountain torrents are usually dry; but they are subject to the danger experienced by Alexander, of the water rushing down so suddenly and rapidly as to render escape difficult.

Inhabitants.] The number of the inhabitants is estimated at 3,000,000. They consist principally of two tribes, the Belooches and the Brahooes; but there are also a considerable number of Hindoos and Parsees in the large towns. The Belooches are honorable robbers; plunder, on a small scale, being held by them

in the utmost contempt; but they frequently make incursions into the neighboring countries, and rushing out at midnight upon devoted villages, set them on fire, and kill or carry off men, women, children and flocks. The Brahooes are a peaceable, mild, honest and industrious race, inhabiting the mountainous districts, and subsisting chiefly on their flocks. Both these nations are divided into numerous tribes, under separate chiefs, most of whom acknowledge the sovereignty of a khan or king, who resides at Kelat. Some of the tribes, however, are subject to the king of Cabul.

Chief Towns.] *Kelat*, the capital, is a well built town, in lat. 29° 6' N. lon. 67° 57' E. It contains the royal palace and about 4,000 houses and has a lively trade.

HINDOOSTAN.

Situation and Extent.] Hindoostan is bounded N. by Tibet; E. by Farther India; S. E. by the bay of Bengal; S. W. by the Indian ocean, and N. W. by the kingdom of Cabul. It has natural boundaries on all sides, viz. the Indus, the Himmaleh mountains, the bay of Bengal and the Indian ocean. It extends from 8° to 35° N. lat. and from 68° to 92° E. lon. The area is estimated at 1,020,000 geographical square miles.

Divisions.] Hindoostan is divided by Major Rennel into four parts. 1. Gangetic Hindoostan, or the part watered by the Ganges and its tributaries, lying in the N. E. 2. Sindetic Hindoostan, or the part watered by the Sinde or Indus, lying in the N. W. 3. Southern Hindoostan, or the part south of the river Kistna. 4. Central Hindoostan including all the country between the three first divisions. Each of these divisions is subdivided into several provinces, which are given in the following table, together with the state or sovereign to whom they belong.

	Provinces.	To whom belonging.
Gangetic Hindoos- tan.	Nepaul.	The British and the rajah of Nepaul.
	Bengal,	The British.
	Bahar,	The British.
	Allahabad,	The British, Mahrattas and several Hindoo chiefs.
	Oude,	The British and the nabob of Oude. [doo chiefs.
	Agra,	The British, Mahrattas, Jauts & several other him-
	Delhi,	The British and a number of Hindoo & Seik chiefs.

	Provinces.	To whom belonging.
Sindetic Hindoos- tan.	Cashmere,	The Afghans.
	Lahore or the Punjab,	The Seiks.
	Moultan, Sinde,	The Afghans and several Hindoo and Seik chiefs. Several Mahometan chiefs.
	Ajmeer,	The rajahs of Odeypore, Jypore, Joudpore, and several other Hindoo chiefs, some of whom are Mahrattas.
Central Hindoos- tan.	Gujerat inclu- ding Cutch,	The British, Mahrattas, and a number of in- dependent petty chiefs.
	Malwah,	The Mahrattas, and several other Hindoo chiefs.
	Khandesh,	The Mahrattas.
	Berar,	The Mahrattas and Nizam.
	Gundwapa,	The Mahrattas and several other Hindoo chiefs.
	Aurungabad,	The Mahrattas and Nizam.
	Hyderabad,	Nizam.
	Nandere,	Nizam.
	Orissa,	The British and Mahrattas.
	Circars,	The British.
	Bejapore,	The Mahrattas and Nizam.
	Mysore,	The rajah of Mysore.
Southern Hindoos- tan.	Cochin,	The rajah of Cochin.
	Travancore,	The rajah of Travancore.
	Canara,	The British.
	Malabar,	
	Carnatic, Travancore,	

The following is given by Mr. Hamilton as an estimate of the extent and population of the territories belonging to each of the sovereign states or princes occupying this vast region.

	British Possessions.	Geographical square miles.	Population.
Under Bengal Presidency,		222,000	39,000,000
— Madras Presidency,		125,000	12,000,000
— Bombay Presidency,		10,000	2,500,000
	Total,	357,000	53,500,000
British allies and tributaries,			
The Nizam,		76,000	8,000,000
The Peishwa,		53,000	5,000,000
Nahob of Oude,		13,000	2,000,000
The rajah of Mysore,		22,000	2,000,000
The rajahs of Travancore & Cochin,		5,000	500,000
	Total,	169,000	17,500,000
Independent Principalities.			
Under Scindia, Holkar and other Mahratta chiefs,	}	75,900	6,000,000
— Nagpoor rajah,		58,000	3,000,000
— rajah of Nepaul,		63,000	2,000,000
— rajah of Lahore and the Seiks,		54,000	4,000,000

Under the Rajpoot chiefs, king of Cabul, rajahs of Bootan and Assam, and innumerable petty native chiefs,	} 244,000	15,000,000
Total,		
	494,000	30,000,000
Grand total,	1,020,000	101,000,000

Mountains.] 1. The lofty chain of the *Himmaleh mountains* stretches along the whole northern boundary, separating Hindoostan from Tibet. 2. The *western Ghauts* commence at Cape Comorin, the southern extremity of Hindoostan, and run along the western coast of the peninsula to the river Tuptee in lat. 21° N. They are generally between 3,000 and 4,000 feet high, and present towards the sea an abrupt and steep declivity. 3. The *eastern Ghauts* are a shorter range, commencing on the north side of the river Cavery, and running nearly parallel with the eastern or Coromandel coast to the river Kistna. They are in some places 3,000 feet high, and divide the province of the Carnatic into two parts, called the Carnatic Bala-ghaut (or above the Ghauts) and the Carnatic Payeen-ghaut (or below the Ghauts.) 4. The *Vindhya mountains* commence in the province of Bahar and run from east to west through the provinces of Allahabad and Malwah, separating the waters which run north into the Ganges from those which run south into the Nerbuddah.

Face of the Country.] The northern part of Hindoostan, included between the Himmaleh and Vindhya mountains, forms an immense plain, such as, under the rays of a tropical sun, is too often exposed to extensive aridity and desolation. It is preserved, however, from these evils by that mighty storehouse of waters contained in its great northern barrier of mountains. From every part of this chain vast floods are poured down, which spread their innumerable channels over the plains beneath. These streams, however, descending from the north, direct themselves either eastward to the Ganges, or westward to the Indus, and leave between the two rivers an extensive unwatered region, which forms a great sandy desert, approaching in its aspect to the most dreary parts of Arabia and Africa. Central Hindoostan is intersected by the Vindhya mountains, the western Ghauts and several inferior ranges proceeding from them. The country south of the Kistna, included between the western and eastern Ghauts, consists of a high table land, elevated 2,000 or 3,000 feet above the level of the sea.

Rivers.] The *Ganges* is the principal river. The source of this celebrated stream was for a long period involved in obscurity. A survey has, however, been recently made by order of the British Indian government, and it has been found to issue in a small stream, under the name of Bhagirathi, from under a mass of perpetual snow, accumulated on the southern side of the Himmaleh mountains, between 31° and 32° N. lat. and 78° and 79° E.

lon. In lat. $30^{\circ} 9' N.$ it receives the Alcananda, and the united stream, taking the name of the Ganges, pursues a southwesterly course for 30 or 40 miles, till it issues from the mountains at Hurdwar, where it turns to the S. E. and after receiving numerous tributaries, divides at Sooty, in lat. $24^{\circ} 26' N.$ the smaller arm here again takes the name of the Bhagirathi, which the Hindoos are taught to believe has run unmixed from its source with the less sacred rivers, and passing by Calcutta, discharges itself into the bay of Bengal; while the larger stream continues its course under the name of Puddah, and after throwing off several branches receives the mighty Brahmaputra near the point where it discharges itself into the ocean. The lower part of the Delta of the Ganges, called the Sunderbunds, is an uninhabited country, overgrown with forests, and infested by tigers. The Ganges is computed to be 1500 miles in length, and at 500 miles from its mouth is, during the rainy season, 4 miles broad and 60 feet deep. Its principal tributaries are, 1. The *Junna*, which rises in the Himmaleh mountains a little west of the sources of the Ganges, and after passing the cities of Delhi and Agra, receives the *Chumbul*, a great river, from the south, and falls into the Ganges at Allahabad. Its length may be estimated at 780 miles. 2. The *Gogra*, which rises in the Himmaleh mountains, and joins the Ganges near lat. $26^{\circ} N.$ 3. The *Brahmaputra* or *Burrampooter*, which rises in Tibet on the north side of the Himmaleh mountains, near the sources of the Ganges, and after a long course to the east, turns to the west and afterwards to the south and joins the great eastern branch of the Ganges near its mouth.

The *Indus* or *Scind* is formed by two streams, one of which, called the *Leh*, rises on the N. side of the Himmaleh mountains, not far from the sources of the Ganges, and running in a N. W. direction meets the other branch near Leh or Luddack in lat. $36^{\circ} N.$ The united stream taking a S. W. direction breaks through the mountains, and forming the western boundary of Hindoostan discharges itself by several mouths into the sea after a course of 1,300 miles. In lat. $28^{\circ} 20' N.$ it is joined by the five rivers of the Punjab, united into one stream, called the *Punjnud*. The longest of the five rivers is the *Setledge*, which rises on the N. side of the Himmaleh mountains near the sources of the Ganges and Brahmaputra.

The *Nerbuddah* rises in the province of Gundwaneh, and running in a westerly direction for 750 miles falls into the gulf of Cambay. The *Tuptee* or *Taptee* runs parallel with the Nerbuddah, and passing by Surat falls into the gulf of Cambay 12 miles below.

The *Mahanuddy* rises near the source of the Nerbuddah, and running in a S. E. direction discharges itself into the bay of Bengal through several mouths in about lat. $20^{\circ} N.$ The *Godavery* rises in the Western Ghauts about 70 miles N. E. of Bombay, and running in a S. E. direction for 800 miles, discharges itself by several mouths into the bay of Bengal between 16° and $17^{\circ} N.$ lat. The *Kistna* or *Krishna* rises in the Western Ghauts and after

a circuitous course to the eastward of 650 miles empties itself into the bay of Bengal by several mouths near lat. 16° N. The *Cavery* rises also in the Western Ghauts, and passing by Seringapatam, Trichinopoly, and Tanjore discharges itself by several mouths into the bay of Bengal.

Climate and Seasons.] The climate varies considerably according to the difference of latitude and elevation. The mountains on the northern frontier are covered with perpetual snow, while in the plains beneath and in the low country on the coasts of Southern Hindoostan, the heat is intense. The table land between the Eastern and Western Ghauts enjoys a more temperate and healthy climate than any other tract of similar extent within the tropics.

In Bengal, the hot or dry season begins with March and continues to the end of May. From June to September is the rainy season, and the country is then deluged, the water descending like cataracts from the clouds: by the latter end of July, the Ganges and Brahmaputra have risen 32 feet, and all the lower parts of Bengal, contiguous to these two great rivers, are overflowed to an extent of above 100 miles in width. The three last months of the year are generally pleasant; but excessive fogs prevail in January and February. The periodical rains are also felt in Sindetic Hindoostan, except in Cashmere, whence they seem to be excluded by the surrounding mountains. In the southern part of the peninsula the chains of the Ghauts, supporting the high table land in the centre, intercept the great mass of the clouds, and the monsoons, which blow alternately from the N. E. and S. W. for six months in succession, occasion a rainy season on the windward side of the mountains only. The monsoon is from the S. W. from May to October, and during the rest of the year in the opposite direction.

Soil and Productions.] An extensive tract on the east of the Indus has been already described as a sandy desert, and there are some marshy districts on the sea-shore, which are rendered unfit for culture from the excessive supply of water; but notwithstanding these deductions, Hindoostan contains, perhaps, within its vast limits, a greater proportion of land capable of cultivation than China excepted, any other country on the globe. The staple article of food and culture throughout the whole of India is rice, which is combined, however, with pulse and millet. Two crops are commonly raised in the year, one of rice, and the other of millet or pulse. Rice, depending entirely upon moisture, is the most precarious of all crops. It is not reckoned a scarcity when it rises to four times the price of a cheap year. When the rains fail entirely, famine ensues, and brings with it a train of calamities, of which Europe happily is unable to form an idea. Among the other productions are sugar, cotton, tobacco, silk, indigo, opium, and saltpetre. The table land of Mysore produces also the fruits and vegetables of Europe.

Agriculture.] Agriculture has been honored and practised from the earliest ages. The methods employed, however, are im-

perfect in the extreme. The plough merely scratches the ground; no idea is entertained of the advantages of a scientific rotation of crops; and manure is almost entirely neglected. The only part of Indian husbandry which can edify an European observer, is irrigation, in effecting which considerable skill as well as industry is displayed. Ponds, tanks and reservoirs are formed on a large scale for retaining water, which is raised from the lower grounds into the higher, and small canals are dug for distributing it over the fields.

Manufactures.] India has long been celebrated for her manufactures, particularly for cotton goods, which are distinguished into muslins and calicoes. Both are manufactured in almost all India, but particularly in Bengal and the northern part of the coast of Coromandel. These superb fabrics, the pride of the East, have by British skill and capital been produced more cheaply and abundantly, but by no means of equal richness, beauty and durability. Yet the Hindoos know nothing of that splendid machinery on which the science of Europe has been exhausted. The weaver is a mere insulated individual. His instruments are simple, and all made by himself. With his own hands he carries the cotton through all the processes preparatory to its being put into the loom. He has no sure vent for his commodity, but merely makes a web, as the tailor a coat, or the shoe-maker a pair of shoes, when a customer orders it.

Chief Towns.] The cities of Hindoostan are in general built on one plan, with very narrow and crooked streets, a great number of reservoirs for water, and numerous gardens interspersed. The houses are variously built, some of brick, others of mud, and still more of bamboos and mats.

The following are the principal towns in Gangetic Hindoostan. 1. *Calcutta*, the capital of all the British possessions in India, and one of the largest cities in the world, is on the E. bank of the Bhagirathi or Hoogly river, about 100 miles from the sea. It is a place of immense commerce in sugar, salt, silks, muslins, calicoes, opium, &c. and is inhabited by merchants from every part of Asia and Europe. The houses of the natives are generally mud cottages, but those of the English are splendid brick palaces. The population is estimated at more than 500,000. 2. *Moorshedabad*, formerly the capital of Bengal, is on the E. bank of the Bhagirathi river, about 120 miles above Calcutta. 3. *Patna* is a celebrated city on the S. bank of the Ganges 250 miles N. W. of Calcutta. The population is estimated at 500,000. 4. *Benares*, the ancient seat of Brahminical learning, is on the N. bank of the Ganges 120 miles W. of Patna. It is denominated "the Holy city," and the Hindoos conceive that a person dying here is certain of paradise, a notion which contributes to the increase of its population. The number of inhabitants is estimated at 580,000, and during the festivals the concourse is great beyond calculation. 5. *Allahabad*, situated at the junction of the Jumna with the Ganges, is resorted to every summer by multitudes of pilgrims from all parts of India. 6. *Agra*, on the Jumna, 800 miles N. W. of Cal-

cutta, was at one time the capital of India and contained 609,000 inhabitants. It is still a populous city. 7. *Delhi*, on the Jumna, 150 miles N. W. of Agra, is the residence of the great Mogul, who is still nominally the emperor of Hindoostan, but in fact is reduced to a state of the most humiliating dependence, his family and establishment being supported entirely by revenues allotted to him for that purpose by the British. 8. *Hurdwar* or *Haridwar*, situated 86 miles N. of Delhi, on the W. bank of the Ganges, near the place where it issues from the mountains, is celebrated for its annual festival and fair, at which pilgrims are collected from all parts of India and the neighboring countries. Every twelfth year the number is much greater than usual and has been estimated at 2,000,000. 9. *Dacca*, 180 miles N. E. of Calcutta, is the most celebrated place in India for the manufacture of muslins.

The following are the principal towns in Sindetic Hindoostan. 1. *Moulton* is a large town situated near the *Chunab*, one of the five rivers of the Punjab, in lat. $30^{\circ} 20'$ N. 2. *Lahore*, on the river Ravee, in lat. $31^{\circ} 50'$ N. lon. $73^{\circ} 48'$ E. was formerly the capital of Hindoostan, and the great Moguls expended large sums here in the erection of palaces and gardens. The population is estimated at 150,000. 3. *Cashmere* or *Serinagur* stands in a beautiful country on the river Jhyllum, in lat. $34^{\circ} 20'$ N. lon. $73^{\circ} 44'$ E. The population is estimated at 150,000 or 200,000. 4. *Attock*, on the east bank of the Indus, is celebrated as the place where Alexander the Great, Tamerlane and Nadir Shah, crossed that river in their invasions of India.

Central Hindoostan contains the following large towns, 1. *Cambray*, at the head of the gulf of the same name. 2. *Surat*, on the S. bank of the Taptee, 12 miles from its mouth, is a place of great trade, and is celebrated as the port where the Mahometans of India embark on their pilgrimage to Mecca. The population is estimated at 500,000 and is composed of a great variety of nations. 3. *Bombay*, 170 miles south of Surat, is on a small island, separated from the continent by a narrow strait, and connected with the large island of Salsette by a causeway. It is the capital of all the British settlements in this part of India, and carries on an extensive commerce with various parts of Europe, Asia, and America. Ship building has also been recently carried on to a great extent, and the city has become one of the most important naval arsenals of the British. The population is estimated at 220,000, of whom about three-fourths are Hindoos, 8,000 Parsees, 8,000 Mahometans, and 3,000 or 4,000 Jews. The American Board of Commissioners for Foreign Missions have employed several missionaries in this city and its neighborhood since 1814. In 1819 they had translated the whole of the New Testament and a considerable part of the Old, into the Mahratta language, which is spoken not only in Bombay but by many millions on the neighboring continent. The schools established by the missionaries contained in 1819 more than 1000 pupils. 4. *Juggernaut*, the seat of a famous Hindoo idol is on the coast of Orissa, in lat. $19^{\circ} 49'$ N. More than 1,000,000 Hindoos annually visit the temple

at this place. Multitudes perish on their journey, and the country for 50 miles round is strewed with human bones and skulls.

The following towns are in Southern Hindoostan. 1. *Madras*, the capital of all the British possessions in the south of India, is situated in a low sandy plain on the coast of Coromandel in lat. $13^{\circ} 5' N$. It carries on an extensive trade with different parts of Asia and Africa; but suffers for want of a good harbor. The population is estimated at 300,000. 2. *Arcot*, the capital of the Carnatic, is on the Palar, 73 miles W. S. W. of Madras. 3. *Seringapatam* is on an island in the river Cavery, 290 miles west of Madras. It was formerly the capital of Mysore, and strongly fortified. The British took it by storm in 1799 after a short but celebrated siege. 4. *Goa*, the capital of all the Portuguese settlements in India, and once the seat of a noted Inquisition, is on the western coast in lat. $15^{\circ} 30' N$. 5. *Travancore*, the capital of the country of the same name, is near the southern extremity of Hindoostan. 6. *Tanjore* is situated in a plain between two arms of the Cavery 156 miles S. S. W. of Madras. 7. *Pondicherry*, on the coast of the Carnatic, in lat. $11^{\circ} 56' N$. is the capital of the French establishments in India. 8. *Cochin* is on an island on the western coast in lat. $9^{\circ} 58' N$.

Religion.] The Hindoos generally believe in the existence of one Supreme God, whose attributes are described in the most sublime and lofty terms; they consider him, however, as taking no interest in the affairs of the universe, but fixed in perpetual repose. The government of the world devolves on the Triad, consisting of Brahma, the creator; Vishnu, the preserver; and Siva, the destroyer. Vishnu is the most active member of the Triad, and has gone through a series of incarnations for the deliverance of the human race from various dreadful evils to which they have been exposed. Besides these, there are an innumerable host of lesser deities, some of whom are personifications of the sun, moon and planets, and some are a rebel race who correspond nearly to the Giants and Titans of the Grecian mythology, and have often obtained a temporary possession of heaven. The cow is the object of the profoundest reverence, and most devout worship throughout all Hindoostan, and the monkey is much honored. The Ganges also is adored as a Deity; the sight of its waters purifies from the most heinous sins, and to die on its banks is a sure passport to heaven. In regard to a future state, the Hindoos believe that those rigid ascetics, who withdraw from the world and spend their lives in self-torture will attain the supreme felicity of being absorbed into the divine essence; while the souls of the less holy will transmigrate into the bodies of men and brutes.

Religious Customs.] Suicide and self-torture are regarded by the Hindoos as meritorious actions. They believe that whoever drowns himself in the Ganges or buries himself alive will be happy for ever. Formerly they sawed themselves to death; the saw being so constructed that the person wishing to sacrifice himself,

would set it in motion with his feet, and instantly tear himself to pieces. Infanticide is very common, and in the west of India there is a race of Rajpoots, who put all their female children to death. It is estimated by Mr Ward that about 5,000 widows every year burn themselves to death on the funeral piles of their husbands. Self-torture is also practised in various ways. Sometimes the man stretches himself on a bed of spikes or of burning coals; sometimes he hangs in the air suspended on an iron hook, plunged through the flesh of his back, and sometimes he lies on the ground for years together, with his eyes open, gazing at the sun.

Casts.] The Hindoos are divided into four casts or classes. 1. Bramins or priests. 2. Kshatryas or soldiers. 3. Vaisvas or merchants. 4. Sudras or laborers. These casts are all kept distinct and are not permitted to intermarry, or even to eat and drink with each other. Each class is obliged to adhere rigidly to a series of minute and painful observances, otherwise a loss of cast would be incurred, which is much dreaded by the Hindoos, as it involves an exclusion from all the benefits and charities of life; the sufferers being viewed by their nearest friends as things utterly odious and abominable. These outcasts are called Pariahs, and are supposed now to constitute one fifth of the population of India.

Literature.] The literature of the Hindoos is founded entirely on their religion. The design of their serious works is to expound the doctrines and duties of religion, while their gay compositions narrate the exploits of their gods, goddesses and deified heroes. The sacred books are called Vedas; the Shastras are a commentary on the Vedas; and the Puranas contain the history of the gods. All these writings and all their poems are puerile and extravagant to the last degree. None of the sciences dependent on *fact* have any existence. History and geography are entirely unknown, and in astronomy the calculations are carried on by mechanical rules, without any idea of the principles upon which they depend.

Domestic Life.] The Hindoos universally marry. A man at 25, and a female at 15, unmarried, would be considered as extraordinary phenomena. Women, however, are held in contempt; the idea of their being companions to the husband is out of the question. The husband who enters into familiar conversation with his wife, is despised even by herself. She is not even permitted to eat with him. In the event of the husband's death, the widow must for ever remain unmarried. On the other hand, when the wife dies, the husband loses not a moment in choosing a second partner.

Character.] The first impression made upon Europeans, by the Hindoos, was very favourable. The dacency of their form, their polished and flattering address, the absence of all bustle and turbulence, joined to the display of pomp and wealth in their courts, gave the idea of a refined and elegant people. A more intimate acquaintance, however, has proved that notwithstanding

this apparent politeness, entire selfishness forms the basis of their character. The love of money is the supreme idol of the Hindoo, and to obtain it he is unscrupulous to a degree of which no idea can be formed by an European. Throughout all India there is said to be scarcely such a thing as common honesty. Lying and deliberate perjury are also universal.

Population.] The population of Hindoostan is estimated by Mr. Hamilton at 101,000,000; including, however, the Hindoos subject to the king of Cabul, as well as the inhabitants of Bootan and Assam, who are tributary to the Chinese. The great mass of the population consists of Hindoos, but about one eighth part are Mahometans descended from the Arabs, Afghans and Tartars, who have at various periods conquered large portions of the country.

Mahrattas.] The Mahrattas are a warlike race of Hindoos, whose original seat was the country in the N. W. of the peninsula between the rivers Nerbuddah and Godavery, including the province of Khandeish with part of Berar and Aurungabad. This territory is of very uncommon natural strength, being everywhere interspersed with mountains and defiles, which are defended by forts, and cannot be penetrated without extreme difficulty by an invading army. The Mahrattas first began to make a figure in Indian history about 150 years since, and in the height of their power, their dominions extended as far south as the Kistna and north to the Ganges. They were recently divided into several tribes under independent chiefs, the most celebrated of whom were Scindia, Holkar and the Peishwa, all of whom have been subdued in their recent contests with the British, and reduced to a tributary and dependent condition. They still continue, however, to bite the curb, and are ever prepared, should occasion offer, to erect anew the standard of independence. Their troops consist entirely of horsemen.

Pindarees.] The Pindarees are another warlike race occupying the mountainous region along the north side of the Nerbuddah. They are intimately connected with the Mahrattas, but differ from them in their faith, which is that of zealous Mahometans. Plunder has always been extensively practised by the Mahrattas, but the Pindarees are robbers on a great scale.

Seiks.] The Seiks are a new religious sect, who originated in the fifteenth century, and now occupy the province of Lahore in the N. W. of India, together with the western half of Delhi and a part of Moultan. Their religion is pure Deism, the founder of the sect intending to unite the Mahometans and Hindoos by dwelling on those points in which they both agreed. They are warlike and, it is said, can bring 100,000 horsemen into the field.

Syriac Christians.] The province of Travancore, at the southern extremity of Hindoostan, is peculiarly interesting, as the residence of the Syriac Christians, who it is supposed, were converted by the apostle St. Thomas. They have preserved the institutions of Christianity in a considerable degree of purity, although surrounded for ages by the darkest idolatry and wickedness. They were discovered by Dr. Buchanan in 1806, and the English have

since sent missionaries among them, and a college has been established for the education of their priests. The number of churches was at one time upwards of 100.

Jews.] In the vicinity of Cochin there is a colony of Jews, divided into the white and black Jews. The white Jews report themselves to have come hither not long after the destruction of Jerusalem. The black Jews are evidently of much higher antiquity and probably arrived at the time of the first dispersion.

Portuguese and French Possessions.] The Portuguese own the city of Goa, on the western coast of the peninsula, and a small territory around it containing in all about 8,000 square miles and 100,000 inhabitants. The French also have small territories on the Coromandel and Malabar coasts, and in Bengal, containing in all about 200,000 inhabitants. Their principal towns are *Pondicherry* on the coast of the Carnatic, south of Madras, and *Chander-nagore* on the Hoogly, 21 miles above Calcutta.

BRITISH INDIA.

History.] This vast country has been brought under the dominion of the British East India company almost entirely since the middle of the last century. Before that time the British possessions were principally confined to a few small territories in the neighborhood of Madras, Calcutta and Bombay, while the rest of the country was chiefly subject to the great Mogul. This vast empire, however, was now beginning to sink under its own weight and became divided by rebellion into a number of separate fragments. The English lent their aid in supporting for a moment the sinking throne of the Mogul, and as their reward obtained in 1765 the government of Bengal, Bahar and part of Orissa. Since that time, by taking advantage of the dissensions between different chiefs, they have extended their dominions over nearly the whole country.

Europeans.] In 1805 the whole number of Europeans residing in India amounted to 31,000. Of these 22,000 belonged to the army; 2,000 were employed in the civil service; 5,000 were free merchants and mariners; 300 lawyers, and the remaining 1,700, adventurers of various descriptions.

Tenure of Empire.] To a superficial observer, the tenure on which the British Indian empire is now held, appears quite insecure. That a hundred millions of men should submit to the yoke of 20,000 or 30,000 natives of a country separated from them by half the globe, and whose religion and manners are in their eyes utterly odious and contemptible, seems impossible. The Hindus, however, have been accustomed for so many ages to the sway of a foreign and absolute master, that they have no conception of national independence, and would never dream of joining in an attempt to alter the government.

Sepoys.] To supply the want of European numbers, the English have had recourse to a system which at first sight appears perilous. Native troops, called Sepoys, are employed to aid in the subjugation of their own countrymen. The success of the plan depends on that profound apathy with regard to the condition and fortune of their country, which pervades every part of the Indian population. These troops, led by British officers, have displayed great courage, and are generally as manageable, and not much less efficient than an equal number of British troops.

Cadets and Writers.] India appears to Britain in an interesting point of view, as affording employment to a number of young men in the middling and even in the highest ranks of society. According to the two lines of service, the Indian adventurers are divided into *cadets* and *writers*. The cadets or military expectants are much the most numerous; but their emoluments are less considerable, and except in cases of peculiar good fortune, they cannot return to England with much more than a genteel competence. The most eligible situation is that of *writer*, and the very highest interest is required to obtain an appointment. The young expectant must not be under 16 nor above 20; he is required to pass a certain period in Hertford college in England, where he is instructed in science and general literature, and is then sent to the college of Calcutta to learn the native languages. There are 4 departments in which writers may be placed, the diplomatic, the judicial, the commercial, and the collection of the revenue. The emoluments of these different civil officers vary extremely, but those who have passed the rank of assistants, may be stated, generally, as enjoying from £2,000 to £4,000 a year, and sometimes still more.

Revenue.] In 1809, the entire revenue drawn from British India amounted to about £15,500,000; the expense of the military establishment was £8,404,298, and that of the civil service £4,789,373. At the same period the debt of the Company was about £30,000,000 and their assets £20,127,707.

Commerce.] The commerce of Britain with India was till very recently carried on exclusively by the English East India Company. From 1702 to the last renewal of the charter in 1813, the exclusive rights of the company were rigidly maintained. They comprehended all the coasts of eastern and southern Asia, and of eastern Africa, from the Cape of Good Hope to Asiatic Russia. Not a British vessel, unless under their colors, could sail through the Indian seas. When British capital, however, excluded from many of its wonted channels, was seeking employment in the remotest extremities of the world, a clamor arose against the system by which it was shut out from territories of such vast extent. As the Company also, when their accounts were called for, were obliged to own, that every branch of their trade, except that with China, was productive of loss, there remained no reason for excluding their fellow subjects from reaping benefit by that from which they themselves reaped none. In the renewal of the charter every real advantage was secured

to them, since it continued not only their territorial dominion in Hindoostan, but their exclusive trade to China. The wide coasts, however, of India and its islands, of Persia, Arabia and eastern Africa, were thrown open to the commercial enterprise of British subjects in general. This new opening has been embraced by the British merchants with characteristic vigor and enterprise. The first returns were found highly advantageous, yielding in many instances a profit of a hundred per cent. Goods that had been sent out chiefly in despair of finding another market, proved sometimes the most acceptable of any, and even the cottons of Paisley and Manchester from their superior cheapness were found to cope successfully with the staple fabrics of India. This unexpected result immediately occasioned a great extension of the trade, and India was soon as completely glutted with British produce, as the other markets of the world. The principal articles imported into India, previous to 1813, may be ranked as follows; bullion, woollen goods, naval stores, copper, lead and iron: the principal exports were cotton goods, sugar, indigo and saltpetre.

Missions and Translations.] Within the last 20 years, many missionaries have been sent to this country by the different denominations of Ohristians in Britain and America. A few years since they were 150 in number, and scattered through all the principal towns of British India. The most important station is that of the Baptists, at Serampore, a Danish settlement on the Hoogly, 15 miles N. of Calcutta. The missionaries arrived there in 1799, and have ever since been engaged in preaching to the natives and in translating and printing the Holy Scriptures. In 1818 the whole Bible had been translated and printed in five of the languages of India, and the New Testament in eight more. At the same time 12 other versions of the New Testament were in the press. There is now scarcely a people from the Indus to the Pacific ocean who may not read in their own language, the greater part of the sacred volume. The printing office is an extensive establishment, and 10 presses are kept constantly employed. The schools established by the missionaries contained in 1819 nearly 10,000 scholars. A college for the education of native preachers has been recently established, and contained in 1819, 37 pupils. A mission college has also recently been established at Calcutta by members of the English church, for the purpose of preparing the natives and others, to become preachers, catechists and schoolmasters.

CASHMERE.

Situation.] The province of Cashmere is a beautiful valley, of an oval form, about 90 miles long, situated chiefly between 34° and 35° N. lat. and between 75° and 76° E. lon. It is surrounded on all sides by lofty mountains, which rise into the re-

gions of perpetual snow, and prevent all communication with the neighbouring countries, except through seven passes, at each of which guards are stationed, who examine all strangers and allow no person to quit the country without a passport. The only mode of transporting goods through these passes is on men's shoulders, the roads being impracticable either for horses or mules.

Rivers, Soil, Climate, &c.] Innumerable rivulets descend on all sides from the mountains, and after spreading verdure and fertility over every part of the valley, fall into the river Jhelum which breaks through the mountains on the southwestern frontier, and pursuing a long course to the S. W. at length falls into the Indus. From its elevated situation the climate of Cashmere is delightful, and the fruits and flowers of both zones are found in the greatest abundance. This beautiful valley was for a long time the favorite retreat of the emperors of Hindoostan during the hot months of the year, and the oriental poets vie with each other in celebrating its praises.

Manufactures.] The principal source of the wealth of Cashmere is its delicate and unrivalled manufacture of shawls. The wool or hair of which the shawl is made is produced by a goat, which is found only in Tibet, from whence the Cashmere merchants are supplied with the wool, and have a monopoly of the commodity.

History.] The inhabitants of Cashmere appear to be Hindoos, and like the rest of their countrymen they have for many ages been subjected to the yoke either of the Mahometans or the Tartars. About the middle of the last century they were conquered by the Afghans, whose dominion has been very oppressive, and the population in consequence has very seriously diminished. According to the latest accounts the governor had revolted and had defeated the forces sent against him from Cabul.

NEPAUL.

Situation.] Nepaul is a long but narrow kingdom occupying the northern frontier of Hindoostan, and bounded N. by the Himmaleh mountains; E. by Bootan; S. by the provinces of Bahar and Oude; and since the late war with the British, it is limited on the W. by the Gogra, a branch of the Ganges, although it formerly extended to the Setledge.

Face of the Country.] Nepaul consists of a series of mountain chains, with deep vallies interposed, descending, as it were by steps, from the highest ridge of the Himmaleh mountains to the level plains of Hindoostan. The tract which immediately borders on the provinces of Bahar and Oude is called the Taryani and consists of an extent of level territory, about 20 miles broad, skirting the whole southern frontier of Nepaul. The soil of this tract is extremely fertile, but for political reasons has been left in a state of nature, and is covered with forests, which abound with

wild animals, particularly elephants. The air is here at certain seasons almost pestilential, which forms as it were a barrier round the country, no army having attempted to act in it without the most severe loss.

Soil and Productions.] The soil of the vallies is well watered and fertile, and as they are generally elevated several thousand feet above the level of the sea they enjoy nearly the temperature of the south of Europe, and yield, with proper cultivation, large crops of grain. Among the most valuable productions is the tree, from the juice of which catechu or India rubber is manufactured. The mountains produce copper, iron and lead in abundance.

Population.] The population is estimated at 2,000,000. The most populous district is the valley of Nepaul proper, which is only 12 miles long and nine broad, but contains Catamandoo, the capital, and is filled with villages. The majority of the inhabitants are the Newars, a peaceable and industrious race, much addicted to agriculture and commerce, and supposed to be of Chinese or Tibetan origin. The mountainous districts are inhabited by various warlike tribes. Besides these there are large bodies of Bramins, who emigrated many ages ago from the low country, and having converted the natives to their system of religion, have established themselves as the first cast here as in Hindoostan, and all the offices of honor and dignity are now in their hands.

History.] For a long period this territory was divided among a number of petty chiefs, and being occupied with its own internal dissensions, acted no conspicuous part in the general affairs of India. Between the years 1765 and 1769, however, the king of Gorkha, one of the northwestern provinces, succeeded in becoming master of the whole country, and afterwards invaded Tibet and plundered several of its most important shrines. The Chinese government now interfered, and sending an army of 70,000 men, not only repelled the invasion, but pursued the enemy into their own territory and dictated terms of peace. In 1814 a dispute arose with the British, in consequence of which the British invaded the country, and conquered the province of Kemaon between 79° and 81° E. lon. and required the king or rajah to restore all the countries west of that province to the dispossessed chieftains. In 1816 the war was renewed with still greater success, and the rajah was required to stipulate that a British envoy should constantly reside at Catamandoo. A commercial treaty has since been formed with the Nepaulese government, and as the British territory now extends to Tibet, it is expected that a commercial intercourse will be opened with that country.

CEYLON.

Situation.] Ceylon is an island in the Indian ocean separated from the coast of Coromandel by Palk's straits, and the gulf of Manaar. It lies between $5^{\circ} 53'$ and $9^{\circ} 57'$ N. lat. The length from N. to S. is 280 miles, and the number of square miles is estimated at 38,000. Its shape is that of a pear.

Face of the Country and Climate.] The general aspect of the country somewhat resembles that of Southern Hindoostan; a high table land intersected with mountain chains occupying the whole interior, while the shores, for the breadth of 6 or 8 leagues, are everywhere low and flat. The climate on the coast is more temperate and healthy than on the continent of India, but the interior of the island is very unhealthy, and has proved extremely fatal to the European armies which have occasionally been sent thither.

Productions.] Ceylon is highly distinguished for its productions in the mineral, vegetable and animal kingdoms. Tin, lead and iron in abundance, are found here; and precious stones are probably more numerous and diversified than in any other part of the world. The most extensive pearl fishery on the globe is carried on in the gulf of Manaar; the beds commence about 15 miles from the Ceylonese shore, and occupy a space about 30 miles long by 24 broad. Among the infinite diversity of vegetables and fine fruits are oranges, lemons, cocoa-nuts, pepper and coffee; but the most valuable of all the Ceylonese plants is the cinnamon tree, the principal plantations of which are on the western coast near Colombo. The elephants of Ceylon are highly celebrated for strength and sagacity, and the great snake called the boa constrictor attains here a length of 30 feet.

Chief Towns.] Colombo, the capital and the seat of the British government, is on the western coast in lat. $7^{\circ} 4'$ N. It has a poor harbor and 50,000 inhabitants. Candy, the capital of the kingdom of Candy, is situated near the centre of the island about 100 miles E. N. E. of Colombo. Trincomalee is on the eastern coast, in lat. $8^{\circ} 33'$ N. It has a fine harbor, which is of great consequence to the British because there is none on the eastern coast of Hindoostan. Point de Galle, at the S. W. extremity of the island, is a fortified town and ranks next to Colombo in respect to trade.

Population.] The population is estimated at 1,500,000. The prevailing religion is Boodhism, but the number of native Protestants is about 150,000, and of Roman Catholics 50,000. Formerly the number was much greater, but of late multitudes have relapsed into idolatry.

Missions.] There are about 30 missionaries in the island sent out from England and America by different religious denominations. In 1816 the American Board of Commissioners commenced an establishment in the district of Jaffna, in the northern part of the island. In 1820 it consisted of 6 ordained ministers

and a physician, who occupied two principal stations, Tillipally and Batticotta, and had under their charge 15 free schools, in which about 700 children were instructed in the common branches of education, and the principles of Christianity.

History.] The coasts of this island were occupied by the Portuguese in 1505, who maintained their superiority here during 153 years, when they were expelled by the Dutch, who in their turn were conquered by the British in 1796. The whole interior of the island, however, was in possession of the king of Candy, a despotic monarch, whose territories reached on all sides nearly to the coast, till the year 1815, when a British army of 3,000 men took the capital, and annexed the whole kingdom to the British dominions.

Islands.] The *Maldives* are a cluster of islands formed from coral, lying a considerable distance west of Ceylon, between the equator and 8° N. lat. and between 72° and 74° E. lon. They produce cocoa nuts and the shells called cowrie, but are now little frequented on account of the dangerous navigation. The *Laccadives* are cluster of low islands lying off the west coast of Hindoostan between 8° and 13° N. lat.

FARTHER INDIA.

Situation.] Farther India or India beyond the Ganges includes all the countries between Hindoostan and China. It is bounded N. by Tibet and China; E. by the China sea; S. by the straits of Malacca, which separate it from the island of Sumatra; and W. by the bay of Bengal and Hindoostan.

Divisions.] Farther India is divided into 1. the Birman empire. 2. Assam. 3. Malacca. 4. Siam. 5. Cambodia. 6. Cochin China. 7. Tonquin. 8. Laos. This part of Asia is but imperfectly known to Europeans, and other names sometimes appear on the maps. Its political condition is very fluctuating, and the four last countries are said now to be united in one kingdom called the kingdom of Anam.

1. THE BIRMAN EMPIRE.

Situation.] The Birman empire, sometimes called Ava, is composed of the four ancient kingdoms of Ava, Pegu, Aracan and Cassay. It is bounded N. by Assam, Tibet and China; E. and S. by Siam; and W. by the bay of Bengal and Hindoostan.

Face of the Country.] The northern part of the country is mountainous, and the southern level. The principal river is the *Irawaddy* which rises in the mountains of Tibet, and running

south divides into numerous streams, all of which discharge themselves into the bay of Bengal.

Climate, Soil and Productions.] The climate is more salubrious than that of Hindoostan. The southern provinces are finely watered and produce luxuriant crops of rice, and in the northern districts wheat of an excellent quality is raised. All the tropical fruits also grow here spontaneously; but the most valuable production for exportation is the celebrated teak timber or Indian oak, which is said to be more durable, and to resist the worms better than any wood that is known, and is now much used by the British in ship building.

Chief Towns.] *Ummerapoora*, the capital, is on the Irawaddy, 400 miles from its mouth. It was founded in 1783, and in 1800 the population was estimated at 175,000. *Ava*, the former capital, is four miles from Ummerapoora, and is now almost deserted. *Pegu*, on one of the outlets of the Irawaddy, was formerly a splendid city and capital of the ancient kingdom of Pegu, but was destroyed by the Birmans, when they conquered this country in 1757. *Rangoon*, the principal port of the Birman empire, and the only place where Europeans are allowed to trade, is on one of the outlets of the Irawaddy, 30 miles from its mouth. The population is about 30,000, and is composed of persons from many different nations. *Arracan*, formerly the capital of a kingdom of the same name, which was conquered by the Birmans in 1783, is situated near the mouth of a river which discharges itself into the bay of Bengal in about 20° N. lat. It has a fine harbor, but no ships are allowed to enter it. *Mergui* is a seaport in lat. 12° 12' N. It gives name to a large cluster of islands in the adjacent sea, called the Mergui archipelago.

Population and Character.] The population is estimated at 17,000,000. The Birmans are entirely different in their character from the Hindoos. They are bold, active, fiery, enterprising and full of curiosity. The fair sex in this country are exempted from that restraint and confinement which they suffer generally in the East. Yet they are not respected, but are subjected to severe labor, and often bought and sold almost as slaves.

Religion.] The religion, as in all the countries of Farther India, is that of Boodh or Buddha, who is universally the object of worship. He is represented as a young man with a placid countenance, and usually sitting cross-legged on a throne. The images are in some cases of the most gigantic magnitude. Monasteries, the inmates of which devote themselves to celibacy and seclusion from the world, are characteristic of this religion. The literature of the Birmans, like that of the Hindoos, is founded almost entirely on their religion.

Punishments.] The mode of punishing crimes among the Birmans is of the most horrid kind. Among the modes of inflicting capital punishment are, beheading, crucifying, starving to death, ripping open the body, sawing it in two, pouring red hot lead down the throat, plunging into boiling oil, and roasting to death

by a slow fire. The milder punishments are putting out the eyes, cutting off the tongue, the hands, feet, ears, nose, &c.

Government.] The government is entirely despotic; the will of the sovereign is the supreme law, and is subject to no check either from the aristocracy or the people. The administration, however, appears to be mild, and property is respected. There are a considerable number of conquered princes, who are allowed to retain the internal government of their own states, upon paying military service and tribute, and residing a certain portion of the year at Ummerapoora.

Army.] The Birmans are a nation of soldiers, yet no regular army is maintained, except about 4,000 royal guards, but in emergency every village is obliged to furnish a certain number of soldiers. The principal dependence, however, is on the war boats, which are built very long and narrow, and each carries from 50 to 80 armed men. Of these, the king, on a short notice, can command about 500. The Birmans are frequently at war with the Siamese, and have sometimes almost conquered them. The two nations cherish an inveterate animity towards each other.

2. ASSAM.

Assam is a country lying between Bengal, Bootan, Tibet and the Birman empire, and intersected by the river Brahmaputra. It is a very fertile country, and produces gold, ivory, pepper, silk and cotton, but the climate is very unhealthy. The inhabitants are jealous of foreigners, and the country has seldom been visited by Europeans, although some commerce is carried on with Bengal by means of the great river Brahmaputra. Ghergoog is the capital. The population has been estimated at 1,800,000.

3. MALACCA.

Situation.] Malacca consists of a large peninsula, extending from 1° to 11° N. lat. and connected with the kingdom of Siam on the north by a narrow isthmus. It is bounded E. by the gulf of Siam, S. by the straits of Malacca, which separate it from the island of Sumatra; and W. by the bay of Bengal.

Face of the Country.] The country is traversed by a chain of very lofty mountains, and is covered with extensive forests and marshes, so that it is very difficult to penetrate into the interior.

Political Condition.] Malacca is divided into 10 or 12 separate states, all of which were formerly subject to the king of Siam, but since the wars between the Siamese and the Birmans, all the southern part of the peninsula has shaken off the yoke, while the northern states pay only a moderate tribute.

Inhabitants.] The inhabitants of the coast are of the race called Malays, who are well known and widely diffused throughout all the Eastern seas. They are of a ferocious and restless dis-

position, strongly attached to a seafaring life, and fond of war, plunder and desperate enterprises. The love of piracy is deeply rooted in their nature; they often attack European ships, and murder all the crew. The inhabitants of the interior are a race of negro savages, who subsist entirely by hunting, and are frequently engaged in war with each other.

Running amok.] The Malays carry the point of honor to the most romantic excess: every thing which they can construe into an insult drives them to a fury bordering on desperation. An accumulation of such treatment impels them at last to those deeds of frenzy, which are known by the name of *running amok*. The Malay who has resolved upon this step, begins by taking a large dose of his favorite opium, till he is half intoxicated; he then throws loose his long black hair, draws his deadly crise, and rushes into the streets, crying "kill, kill;" and in fact kills every one that encounters him in his furious career.

Language.] The Malay language is distinguished above all others in the east for its smoothness and softness, in which respect it has been compared to the Italian. It has become a sort of current and universal language over all the sea coasts of Eastern Asia. This distinction it has attained in consequence of the extensive traffic which the Malays carry on throughout all these countries.

Chief Towns.] *Malacca*, situated on the straits of the same name, formerly belonged to the Portuguese, and was the centre of their trade in these seas. In 1640 it was taken by the Dutch, and in 1795 fell into the hands of the English. Since the formation of the settlement at Pulo Penang or Prince of Wales' island, however, Malacca has been almost deserted. *Pulo Penang* is an island belonging to the British, in lat. 5° 25' N. lying off the west coast of the Malay peninsula from which it is separated by a narrow strait about two miles broad, which forms the harbor, and affords excellent anchorage for the largest ships. A settlement was begun in 1786, and has since rapidly increased. The commerce is now extensive, and the population is composed of a great variety of nations.

4. SIAM.

Situation.] Siam is bounded N. by China; E. by Laos, Cochin-China, and Cambodia; S. by the gulf of Siam and the peninsula of Malacca; and W. by the Birman empire.

Face of the Country.] Siam consists almost exclusively of the valley of the Menam, a great river which rises in Tibet and running south through the whole length of the kingdom, discharges itself into the gulf of Siam. The land on the banks of the river is perfectly level and fertile, but at a little distance on each side it rises into mountains, which separate Siam from the Birman empire on the west, and the countries composing the new kingdom of Anam on the east.

Soil and Productions.] A large portion of the valley is inundated during a part of the year by the overflowing of the Menam, which everywhere fertilizes the soil and enables it to produce ample crops of rice, the only grain of the country and the principal food of the inhabitants. The sugar cane, the cocoa-nut, the pine-apple, the tamarind and the banana are also very plentiful in Siam. The mountains are covered with forests, which abound with wild animals, particularly the elephant. This animal always accompanies the army and the king on public occasions, and to ride it with skill is considered one of the highest accomplishments of the prince or noble. The forests and marshes are also frequented by the rhinoceros, a dangerous animal when enraged and difficult to overcome, his skin being so hard that a musket ball cannot penetrate it. The most numerous and dangerous, however, of all wild animals is the tiger, particularly the royal tiger, the very fierceness of whose aspect is sufficient to appal the most courageous.

Chief Town.] Siam, the capital, is on a low island in the river Menam about 50 or 60 miles from its mouth. The surrounding country is very flat and is intersected by numerous canals through which the people are continually passing in boats. Some of the boats are covered like houses, and the families which inhabit them continually reside on the water, as in China.

Population, &c.] The population is estimated at 4,000,000. In their religion, literature, government, state of the army, cruelty of punishments, and general character, the Siamese bear a strong resemblance to the Birmanians.

Customs.] Among the customs of the Siamese is the decision of all difficult cases in their courts of justice by ordeal. The usual trial is by causing the accused to walk over red hot iron or burning coals, which operation it is supposed the innocent will be able to perform perfectly unhurt. Another ordeal is by water, in which both parties are immersed, and he who remains longest beneath is declared innocent. Pills that provoke vomiting are also employed: they are administered to both parties, and he on whom they first take effect is adjudged guilty. The most perilous test of all is that of throwing the accused to tigers, which animals, it is supposed, will make the proper distinction between the innocent and guilty.

5. CAMBODIA.

Cambodia is bounded N. by Laos and Cochin-China; E. and S. E. by the China sea; S. W. by the gulf of Siam, and W. by the kingdom of Siam. It is watered by the Cambodia river, which runs from north to south through the whole length of the country, and discharges itself by many mouths into the sea. The soil on the river is fertile, producing rice in abundance. The mountains, which rise on each side of the river at a short distance from its banks, yield gold and many precious stones; the forests abound

with wild animals, among which are elephants, lions and tigers. The inhabitants, estimated at 1,000,000 in number, have very little intercourse with other nations, and there are few eastern countries with which Europeans are less acquainted. It probably has been conquered by the king of Cochin-China, and forms part of the new kingdom of Anam. Cambodia, the capital, is an inconsiderable place on the river Cambodia, about 150 miles from the sea.

6. COCHIN-CHINA.

Situation.] Cochin-China is bounded N. by Tonquin; E. by the China sea; S. by Cambodia; and W. by Laos. It extends upwards of 400 miles along the coast.

Face of the Country.] Cochin-China consists of a long narrow plain, included between the sea-coast and a chain of mountains running parallel to, and often approaching within a short distance of it. This plain is of most exuberant fertility, yielding abundantly all the tropical productions, but more particularly rice and sugar.

History.] Within the last 50 years, extensive revolutions have taken place in this part of Asia. The king of Cochin-China is said to have conquered Cambodia, Laos and Tonquin, and his dominions are now known by the name of the kingdom of Anam. All these territories were once included in the Chinese empire, from which they were severed towards the end of the 14th century.

Population and Character.] The population of the kingdom of Anam is estimated at 18,000,000. In their external forms of behavior the inhabitants resemble the Chinese, but in other respects they are a very different people. They are open, familiar, always gay and talkative, while the Chinese are grave, and reserved. They are the most courteous and affable of all the Eastern nations, and treat Europeans with the greatest kindness, while the Chinese, naturally abhor them.

Government.] The government is despotic. The late sovereign, who died in 1820, is described as almost a second Peter the Great. In the course of ten years, he raised his navy from a single vessel to 1,200 of various descriptions. He was equally active in improving the army, which amounts now to 113,000 men, of whom upwards of 40,000 are disciplined after the European system. He did much also in building bridges, facilitating all kinds of commercial intercourse, and promoting agriculture. His successor appears to be of the same spirit.

Commerce.] The coast abounds with fine harbors, the two principal of which are in the bay of Turon under lat. 16° 7' N. The trade is principally with China, to which are exported a vast quantity of sugar and several other articles. Among European nations the favor of government is principally confined to the French, owing to the influence of the Catholic missionaries.

7. LAOS.

Laos is bounded N. by China ; E. by Tonquin ; S. by Cambodia ; and W. by Siam. It is intersected by the large river Cambodia, which is here called the Mecon or Menan-kong. There are few countries in the world respecting which we have so little accurate information. The accounts which have been published contradict each other even in the most important particulars, some recent writers denying that there is any large river in the country.

8. TONQUIN.

Tonquin is bounded N. by China ; E. by the gulf of Tonquin ; S. by Cochin-China ; and W. by Laos ; It is separated from China by an impassable barrier of mountains, which are covered with vast forests, and filled with elephants, tigers and other wild animals, while the rest of the country is beautifully variegated with fertile hills and valleys, and intersected by a great number of rivers. It forms now an integral part of the new kingdom of Anam.

CHINESE EMPIRE.

Situation and Extent.] The Chinese empire is that immense triangular country lying between the Altay mountains on the north, and the Himmaleh mountains on the south ; and between Independent Tartary on the west, and the Pacific ocean and sea of Japan on the east. It is bounded by Asiatic Russia on the N. and by Hindoostan and Farther India on the S. In extent of territory it is the second, and in population the first empire on the globe. The number of square miles is estimated by Hassel at 4,320,000.

Divisions.] This empire consists of China proper, Tibet, Corea, and several other countries which go under the general name of Chinese Tartary.

CHINA PROPER.

Situation and Extent.] China is bounded N. by Chinese Tartary, from which it is separated by a great artificial wall running along the whole frontier, a distance of 1,500 miles ; E. by the Yellow sea and the Pacific ocean ; S. E. by the China sea : S. by Farther India ; and W. by Tibet. It extends from 20° to 41° N. lat. and from 98° to 122° E. lon. The area is vaguely computed at 1,300,000 square miles.

Divisions.] China is divided into 15 provinces, as follows : 1. Pechele. 2. Shantung. 3. Kiangnan. 4. Tchekiang. 5. Fochien. 6. Canton. 7. Kiangsee. 8. Honan. 9. Shansee. 10. Shensee. 11. Sechuen. 12. Houquang. 13. Koeitchoo. 14. Quangsee. 15. Yunnan.

Face of the Country.] The surface appears to be agreeably diversified with hills and vallies, plains and mountains. One chain of mountains, running from west to east, through the southern provinces, seems to be a prolongation of the Himmaleh range. In approaching the sea, it turns to the north-east, and terminates on the coast a little to the south of the great river Yang-tse-kiang. The north of China is also intersected by several chains of mountains, but their direction is unknown, as that part of the country has never been explored by Europeans.

Rivers.] The principal rivers are the *Hoang-ho* or *Yellow river* and the *Yang-tse-kiang*, both of which rise in the unknown regions of central Asia, and after pursuing an easterly course through the whole breadth of China discharge themselves into the sea between the parallels of 32° and 34° N. lat. In one part of its course the Hoang-ho makes a great bend to the north and passes beyond the great wall, but afterwards returns to the south and then resumes its original easterly direction. The Yang-tse-kiang makes a similar bend to the south. Besides these rivers and their tributaries there are two other considerable streams; the *Peiho* in the north, which rises in Tartary and after passing by Pekin, falls into the Yellow sea; and the *Canton river* in the south, which, after a course of nearly 700 miles, falls into the China sea near Canton.

Climate.] The climate is very different in different parts of the country. The heat in the southern provinces is greater than in Bengal, while in Pekin, near the northern frontier, snow lies on the ground for three months of the year, and the climate is colder than under the same latitude in Europe.

Productions.] Owing to the variety of climate, China, in its different parts, is capably of producing all the fruits both of the torrid and temperate zones. The principal cultivated production is rice, which is the general food of the people. In the northern provinces, however, where the severity of the climate prevents the cultivation of rice, its place is supplied by wheat, barley, and other European grains. Next in importance to rice is the tea-plant, of which vast plantations are found in the provinces to the south of the Yang-tse-kiang. In the southern provinces also large tracts are covered with the white mulberry, for the productions of silk, which has long been one of the staples of the empire. The forests produce the camphor tree, from the roots of which camphor is obtained by distillation; the tallow tree, from the fruit of which a green wax is procured and made into candles; and the paper mulberry tree, from the bark of which a species of paper and cloth is made.

Agriculture.] Agriculture is prosecuted with much care, yet in point of science and skill, it can bear no comparison with the

highly improved husbandry of Europe. There are no large farms, few families cultivating more than is necessary for their own subsistence; there is no rotation of crops; the plough is a wretched instrument; and in many places the spade and the hoe are the chief means of cultivation. The most remarkable circumstance in Chinese agriculture is the care taken to bring every spot under cultivation; even steep hills and mountains being converted into terraces, one above another, each supported by a mound of stone, while reservoirs are made at the top, in which rain is collected, and conveyed down the sides to water the plants. Great pains are also taken to collect manure; and in some parts of the country old men, women and children are constantly seen, with a basket in one hand and a small rake in the other, collecting from the roads and canals every particle of filth.

Minerals.] The large peninsula which juts into the Yellow sea in the province of Shantung is almost entirely composed of rocks of the coal formation, which supply the greater part of China with fuel. Copper abounds in the southwestern provinces. The mines of gold and silver are said to be copious, but these metals have for centuries been continually imported from Europe.

+ *Chief Towns.*] Peking, the capital, and residence of the emperor, is situated near the N. E. corner of the kingdom, within 50 miles of the great wall. Like most other Chinese cities it is regularly laid out. A street four miles long and 120 feet broad reaches from one gate to the other, and is crossed by another of similar length and breadth. The other streets are narrow, and many of them can only be considered as lanes. They are all unpaved, and covered with sand and dust; but they are kept very clean and frequently watered. The principal streets consist almost entirely of rows of shops, which are painted, gilded, and adorned with much magnificence. Blue and green mixed with gold are the prevailing colors upon the walls. The regular form of the streets, the flat roofs and the various signs with which they are decorated, give Peking very much the appearance of a large encampment. The streets are peculiarly crowded, in consequence of the number of trades that are carried on in the open air. The numerous moveable workshops of tinkers and barbers, cobblers and blacksmiths; the tents and booths where tea, fruit, rice and other eatables are exposed to sale; the troops of dromedaries laden with coals from Tartary, and the hand-carts stuffed with vegetables leave only a small space unoccupied.

Peking, according to Chinese ideas, is strongly fortified. It is surrounded with walls about 30 feet high and 25 feet thick at their base, with square towers placed at every interval of 70 yards. The imperial palace is an inclosure within the city formed by what is called the Yellow wall. The space included within it, about a mile long and three-fourths of a mile broad, is artificially formed into an imitation of rude and romantic nature.

The palace without the city presents the same scene on a much more extended scale, the grounds here covering an area of 100 square miles. The population of Pekin is estimated at 3,000,000. Lon. 116° 28' E. Lat. 39° 55' N.

Nankin is advantageously situated for trade on the S. bank of the great river Yang-tse-kiang near its mouth. It was formerly the capital of the empire, but since the removal of the seat of government to Pekin it has much declined. The city is still distinguished, however, for its manufactures and commerce. Its principal ornaments are the gateways, which are very lofty and splendid; and the porcelain tower, which is of an octagonal form, 9 stories high, and mounted by 884 steps. The population is estimated at between 1 and 2,000,000.

Canton is situated at the southern extremity of the empire, near the mouth of a river of the same name. The river for four or five miles is covered with innumerable boats, containing whole families that have no other residence and seldom visit the land. They are ranged in parallel rows, with a narrow interval between each line to admit the passage of other vessels. The city is a place of very great trade, and the only port of the whole Chinese dominions which is open to Europeans. Vast quantities of merchandize are continually exported and imported by the Chinese themselves, in the traffic with various eastern nations, and a very extensive commercial intercourse is now carried on by Europeans, especially the British. The population is variously estimated from 1,500,000 to 2,000,000.

Canals and Roads.] No nation can produce a parallel to the great canal, which runs in a continuous line from Pekin for 500 miles in a southerly direction, and meets the Yang-tse-kiang a little below Nankin. By means of the Yang-tse-kiang and one of its tributaries from the south, the navigation is continued to the frontier of the province of Canton. It is here interrupted by a range of mountains which runs across China, and which must be passed by land, but on the opposite side of the range travellers embark on another river, which falls into the sea near Canton: so that between that city and Pekin, a distance of 1,000 miles, the water communication is uninterrupted, except by a land journey of a single day. Smaller canals, connecting the rivers and larger canals with each other are said to be almost innumerable. The great roads and bridges of China are likewise very magnificent.

Great wall.] The most stupendous of all the public works of the Chinese is the great wall. This mighty rampart runs along the whole northern and part of the western frontier, and is carried over rivers upon arches, over plains, vallies and mountains, through a distance of 1,000 miles. It is built of brick and stone, usually 25 feet high and so thick that 6 horsemen can ride abreast on the top. It is provided with towers at every little interval, and was designed as a barrier against the incursions of the Tartars. The period of its erection is variously stated from 600 to 2000 years ago.

Population.] The population of China has been a subject of much speculation. The number of 333,000,000, which was given by a mandarin to Lord Macartney, as founded on official data, seems abandoned on all hands as an empty vaunt. Geographers now generally place it somewhere about 150,000,000. This amount, compared with the dimensions of China, does not much exceed the proportion of 100 to the square mile, no very extraordinary density, when compared to districts and even kingdoms in Europe; yet probably no other continuous extent of land throughout the globe contains so great a population. Certainly no number nearly so great is any where united under one government.

Government.] The government is an absolute despotism, but is administered with much of the patriarchal spirit. The emperor regards himself as the father of his people, and watches over their welfare with unremitting care and anxiety. All the public proclamations and reports are filled with this sentiment. He is represented as incessantly employed in devising the means of promoting the happiness of the people, and in times of suffering, as mourning over them with the deepest sorrow. That this is the real spirit of the government, appears from the vast and useful public works which have been executed, and the immense population which is maintained in a state of profound tranquillity. Perhaps, upon the whole, China may be given as the example of a despotism administered in the best possible manner.

Army and Revenue.] The army is estimated at 810,000 men, of whom 210,000 are cavalry and 600,000 infantry. The revenue is reckoned by Barrow at £66,000,000.

Mandarins.] The officers of government are called Mandarins, and are divided into nine orders, the lowest of which are entrusted with the collection of the revenue, others are governors of cities, and the highest class are governors of provinces or viceroys. Each mandarin exercises over those placed under him an absolute authority. Great precaution is taken against the abuse of power. No mandarin can hold an office in his native city or province. Care is taken that no one be connected in office with his father, brother, or other near relation, and that he do not remain long in any one place. From time to time also a species of official spies proceed incognito through the provinces to collect the reports of the people respecting their rulers.

Literature and Education.] The Chinese are a reading people, and novels, tales, books of proverbs and other light publications are daily issuing from the press. Standard works on history, law and philosophy are also compiled under the direction of the sovereign. Education is carefully attended to, every town and village having its school. The highest rewards and honors are bestowed on the acquisition of knowledge, proficiency in learning being made the sole test of admission to all offices in the state from the highest to the lowest. An annual examination is

held when every candidate, according to the measure of learning which he has displayed, is promoted to a corresponding place in the government.

Language.] The written language of the Chinese is in some measure hieroglyphical, and to attain a knowledge of it was formerly deemed the labor of life. Travellers represented that each word had a separate character, and that these characters had no connexion with each other. Recent investigation, however, has proved that the language is of a regular and systematic formation, and scarcely more difficult of acquisition than the Greek or even the Latin. It has been discovered that the number of elementary characters is only 214, by the various combination of which all the words in the language are formed. Each element has a distinct meaning by itself, and when two or more are united, the meaning of the compound partakes of that of the several elements of which it is composed. Thus the two elementary characters signifying *fire* and *wood* when united form the Chinese word for *burn*, and the repetition of the character for *wood* forms a compound denoting *forest*. A dictionary of the language has recently been formed by Mr. Morrison in which these characters are used like letters, as heads, under which the different words are arranged. With respect to the pronunciation, the first thing which strikes us is that all the words are monosyllables, that the initial sounds are all consonants, and the final all vowels, liquids or nasals.

Printing.] The art of printing was known and practised in China for a long period prior to its discovery in Europe. It is not performed, however, with moveable types, but with blocks of wood, to which the impression is transferred from the writing, and the word then cut out. They are not unacquainted, however, with the use of moveable types, which are sometimes used for the purpose of altering their compositions, and Mr. Morrison has employed them exclusively in printing his dictionary.

Science.] In most of the sciences the Chinese seem to be behind even the Hindoos. Medicine remains still in a crude and empirical state. Surgery is in the hands of the barbers. Of arithmetic and geometry, they possess merely what is necessary for the common business of life. Astronomy is cultivated with a good deal of attention, as the keeping of the calendar, and the calculation of eclipses are made important affairs of state. This department, however, has never been managed by native Chinese, and for several centuries has been exclusively in the hands of the Jesuits who have been allowed to reside at Peking.

Fine Arts.] The fine arts cannot be considered as in a flourishing state. The public buildings throughout the empire are constructed almost solely with a view to utility. The only edifices in which ornament is studied are the pagodas, which are found in almost every village, but are not remarkable for correct taste. The porcelain tower at Nankin holds an undisputed pre-eminence; but this, polished over like china-ware, and with

bells at every corner, which jingle with the wind, can scarcely be considered as any thing but a huge toy. The paintings of the Chinese are distinguished for rich coloring and close imitation of nature, but the design is poor, and they have not the least idea of perspective. The drama is a favourite amusement, and Peking alone is supposed to contain a hundred companies of players. These, however, do not perform on public theatres, but are hired by individuals to enliven the scene of domestic festivity, and their exhibitions are of the most grotesque and ridiculous nature.

Religion.] There is no established religion connected with the state. The rulers have even been accused of atheism, but without foundation. China has no congregational worship, the government studiously avoiding and prohibiting every thing by which men can be assembled together. The system almost exclusively professed is that of Fo, a modification of the religion of Buddha, which is almost universally prevalent in Eastern Asia, and is distinguished here, as elsewhere, by numerous images of departed worthies, some of gigantic size; by processions, bells, beads, and tapers, forming a striking resemblance to the Catholic rites. The Christian religion has been introduced by the Jesuits, who at one time boasted of 300,000 converts, but their career has been stopped by that hostility to change which is so deeply fixed in the ruling powers.

Manners and Customs.] The excessive populousness of this country has given rise to the cruel custom of exposing infants. Every morning persons are employed to go through the streets of Peking to collect the infants thus abandoned by their parents, and the number exposed in that city alone is supposed to amount to 9,000 annually. In the provinces the practice is less common. The children exposed are chiefly females.—A custom prevails of binding the feet of female children in tight bandages till they cease to grow, a small foot being deemed the chief ornament of a Chinese beauty. The foot of a full sized woman is not more than six inches long. Various stories are related concerning the design of this singular custom, but whatever may have been its origin, it is certain that the Chinese ladies experience very considerable inconvenience from it in moving from place to place. The most prudent observe the caution of keeping close to the wall, and resting against it. Where this prop fails, they can walk only with a timid and tottering step, and with the hazard of being frequently overturned, when the replacing themselves in an erect position is no easy task; nor do their lords ever deign to afford the smallest assistance.

It is not allowed to bury the dead in towns, but the sepulchres are commonly on barren hills and mountains. Mourners clothe themselves in white. The condition of the female sex is very degraded. They are excluded from society and seem generally to be held in very low estimation. Travellers have occasionally observed them yoked in the plough along with an ass, and bearing the chief part of the labor.

Character.] The Chinese have a smooth and polished exterior, and are of a mild, affable and quiet disposition. Other good qualities are steady and unremitting industry; unexampled perseverance in all their pursuits; exactness and punctuality in business; unbounded veneration for parents and ancestors, and a general good humor and courtesy of manners. To balance these virtues, they are remarkably vain, timid, jealous and deceitful. From the emperor to the meanest subject the most entire disregard of truth prevails. Dishonesty in traffic is universal; and their unparalleled skill in the art of cheating has been remarked with astonishment by all their mercantile visitors. They are also wanting in humanity. If a Chinese drop from a vessel into the sea, he is suffered to sink, without the smallest attempt being made to save him.

Manufactures.] The Chinese display great ingenuity in their manufactures. Their porcelain, in the whiteness, hardness and transparency of the substance, and in the beauty of the colors laid upon it, surpasses any imitation that has been made of it. Silks and satins are another staple manufacture, and cottons are made to a considerable extent. There are a variety of little ornamented articles in which Europeans cannot rival them; such as their lacquered wares which are only inferior to those of Japan, and their ivory fans, baskets and toys. Their paper and ink are also of a very superior quality.

Commerce.] The internal commerce of China is unrivalled in extent. The innumerable rivers and canals with which it is intersected, are covered with barges of every form and dimension, interchanging the productions of the different provinces. Considerable commerce is also carried on with the Indian islands by the Chinese in their own junks, no vessel from these quarters being allowed in return to enter her ports. Foreign commerce is viewed with a jealous eye. Europeans have only two points at which they are allowed to trade, one at Kiachta, the emporium for the overland trade of Russia, and the other at Canton. The management of the trade at Canton is vested in 10 or 12 persons, called the *hong* merchants, who are generally men of great wealth, and receive the imperial license to trade with Europeans. All foreign cargoes pass through their hands, and they also provide the cargoes to be exported; but though they thus enjoy a monopoly, yet as they are men of extensive dealings, they do not afford much reason to complain of their conduct. The principal exports are tea, silks, cottons, and china-ware. Among the principal imports are woollen cloths, furs, cotton, opium, and watches. The Chinese pretend that it is entirely from favor to foreigners that they permit any traffic with their empire.

History.] The origin and early progress of the Chinese nation are involved in considerable obscurity. It is supposed that they attained to a considerable degree of civilization earlier than any other nation. They were not, however, exempted from that lot by which the southern empires of Asia have been overwhelmed by successive invasions of the hardy nomadic tribes who wander

over the central table land of this continent. But these conquerors have always yielded in their turn to the arts and institutions of the country which they subdued, and the machine of Chinese polity, after a temporary disorder, has resumed its accustomed action. The most memorable modern conquest was that of Genghis Khan, who, in the 11th century spread his desolating hordes from the shores of the Baltic to those of the Pacific ocean. The Tartars continued to hold the throne from the period of this conquest till 1357, when a rebellion was excited, which terminated in their expulsion, and the Chinese, for 276 years, obeyed their native princes. In 1641 the Tartars, taking advantage of an insurrection, again conquered the country and have ever since continued to hold the sovereignty.

Islands. The *Loochoo islands*, called also *Lieou Kieou*, are situated in the Pacific ocean about 400 or 500 miles east of China, near lon. 128° E. and lat. 26° N. They consist of 36 islands, all of which are small except the Great Loochoo, which is 50 miles long, and from 12 to 15 broad. It was very imperfectly known to Europeans, till visited by captains Maxwell and Hall, in their return from the late embassy to China. The climate and soil seem to be among the happiest on the globe. The whole coast is surrounded with coral reefs, but there are several excellent harbors. The inhabitants are of a diminutive stature, the average height of the men not exceeding five feet and two inches. They are, however, strong, well made and athletic. Their lineaments and appearance indicate a descent from the Japanese or Coreans. In complexion they are quite as fair as the natives of Spain or Portugal. Their disposition appears to be peculiarly gay, gentle, and amiable, and their manners are remarkably polite. During the stay of the English upon their coast they lavished upon them every species of courtesy and hospitality, and at their departure made demonstrations of deep grief, that were quite affecting. This kindness was accompanied, however, with that strong aversion to receive strangers into their country, which is characteristic of China, Japan and all the neighboring regions. Although eager to cultivate the intimacy of the English on board their ships, they carefully evaded for a fortnight every thing which could lead to their coming on shore. They are remarkably honest, not a single instance of theft having occurred during the whole stay of the ships.

Formosa, called by the Chinese *Tai-wan*, is a large fertile island, 240 miles long and 60 broad, separated from the coast of China by a strait 60 miles wide in the narrowest part. It extends from lat. $22^{\circ} 5'$ to $25^{\circ} 20'$ N. *Hainan* is an island of an oval form, 150 miles long and 75 broad. It extends from lat. 18° to 20° N. and is separated from the coast by a channel about 8 miles wide. The greater part of the island is under the dominion of the emperor of China, but the rest is independent.

TIBET.

Situation and Extent.] Tibet is bounded N. by the desert of Cobi or the unknown regions of Central Asia; E. by China; S. by Farther India and the Himmaleh mountains, which separate it from Hindoostan; and W. by Independent Tartary. Including Bootan, which is one of its tributary provinces, it extends from 26° to 38° N. lat. and from 70° to 100° E. lon. The area has been estimated at 400,000 square miles, but we are very imperfectly acquainted with the limits of the country; and its interior is almost wholly unknown, no travellers having visited it in modern times, except Bogle and Turner, who were sent by the British in the character of ambassadors about the year 1783.

Face of the Country.] Tibet has been called the Switzerland of Asia, the mountains of that continent here attaining their greatest height, and spreading themselves as from a centre, over China, India, Persia and Tartary. Here also are the sources of many of the principal streams, as the Indus, the Setledge, the Burrampooter, the Irawaddy, the Menam and the Yang-tse-kiang. The whole country is rugged and mountainous in an extraordinary degree. In Bootan, however, the tops of the mountains are overspread with eternal verdure, and rich with abundant forests of large and lofty trees, while the sides are cultivated with the same care as in China, and are covered with populous villages surrounded by orchards and other plantations. Tibet proper, on the other hand, strikes the traveller as one of the least favored countries under heaven, and appears to be in a great measure incapable of cultivation: the climate, except in the sheltered valleys and hollows, is cold and bleak in the extreme, yet the pastures abound with flocks, and the mountains are rich in minerals.

Productions.] The most valuable productions are the goat, from the wool or hair of which the fine shawls of Cashmere are made; the yak, or ox of Tibet and Tartary, distinguished by the profusion of soft hair, in some parts resembling wool, and by the large tails of glossy hair, which under the name of chowries, are in universal demand over India; gold, silver, quicksilver, copper, iron and many other minerals. Bootan produces rice, wine and a great variety of fruits.

Inhabitants.] The number of inhabitants is estimated by Hassel at 12 or 16 millions. They are a strong, well built people, of a brown complexion, and in many of their features bear a strong resemblance to the Mongols. A part of the nation subsist by agriculture and the arts, and a part are nomades or wandering shepherds.

Government and Religion.] The government of the Tibetians is a theocracy. Their god and sovereign is the Grand Lama, who is believed to be immortal upon the earth. When his body dies, his soul, it is said, immediately transmigrates and re-appears in some infant, who having displayed all the characteristic marks

of identity to the satisfaction of the priests, is received by the nation as its spiritual head and sovereign. The emperor of China is the protector of the Lama, and maintains garrisons in all the principal places. The religion of the Grand Lama is nearly allied to that of Buddha, which originated in Hindoostan, and is now spread over the whole of Tartary and Eastern Asia. Tibet, however, may be considered as the metropolitan seat of this religion, since it contains the residence of the Grand Lama, generally revered as its head, and is the only country where its ministers hold the sovereign sway. The ceremonies of the religion bear a strong resemblance to those of the Roman Catholic church.

Chief Town.] *Lassa*, the capital, and residence of the Grand Lama, is in lon. $91^{\circ} 25'$ E. lat. $29^{\circ} 30'$ N. The city is frequently crowded with royal and noble personages from all parts of Asia, who come to present their homage, and to offer splendid presents to this earthly divinity.

COREA.

Corea is a large country, situated immediately east of China, and consisting of a peninsula, formed on one side by the Yellow sea, and on the other by the sea of Japan. It may be about 400 miles long and 150 broad. The country is known to us only by accounts received through China, and by those of a Dutchman, who was shipwrecked there in the middle of the 17th century. The inhabitants are said to be as civilized as the Chinese, and to resemble them strongly in their literature and arts. They manifest also the same jealousy of foreigners. The king of Corea pays tribute to the emperor of China, and sends an annual embassy to Peking.

CHINESE TARTARY.

Situation.] The name of Chinese Tartary is commonly applied to all that part of the Chinese empire not included in China proper, Tibet or Corea. It extends from these countries on the south to the Russian dominions on the north, and from the sea of Japan in the east to Independent Tartary. The whole of this country is inhabited by wandering tribes, but only the western part is occupied by the proper Tartars, the rest being in the possession of the Mongols and the Mantchoos, who are entirely distinct from them.

Divisions.] This country is commonly divided into three parts. 1. *Little Bukaria*, in the west; 2. *Mongolia*, in the middle; and 3. the *land of the Mantchoos*, in the east.

LITTLE BUKARIA. This country appears to be bounded N. and E. by Mongolia; S. by Tibet; and W. by Independent Tartary

It is almost entirely unknown to Europeans, and all the materials on which its description is founded are imperfect and obscure. The inhabitants are Tartars and Mahometans, and since 1759 have been tributary to the Chinese. The principal towns are Yarkand and Cashgar.

MONGOLIA. Mongolia is an extensive country bounded N. by Asiatic Russia; E. by the land of the Mantchoos; S. by China and Tibet and W. by Little Bukaria and Independent Tartary. It includes a great part of the desert of Shamo or Cobi, and is traversed by the wandering hordes of that nomadic race which, under the name of Monguls or Moguls, have been so celebrated in the annals of Asia. Under Genghis Khan they extended their dominion not only over the finest regions of this continent, but over a great part of northern Europe. At present they are split into a number of petty states, dependent on the emperor of China. The Monguls compose a race by themselves, distinguished by a physical form and aspect entirely different from that of the Turks and Tartars. They are of the middle size, but muscular and strongly built; their faces broad, square and flat; their eyes small, oblique, black and keen. Their herds consist of horses, cows, sheep, goats and a few camels. Their food consists entirely of flesh, of which horse flesh is considered as by much the most delicate. Their favorite liquor is fermented mares' milk, or *Koumiss*, in which they often indulge to excess. Besides the Monguls proper, there is a number of other nations who are considered as included in the same race, particularly the Kalkas, and the Eluths.

COUNTRY OF THE MANTCHOOS. This country is bounded N. by Siberia, from which it is separated by the Altay mountains; E. by the sea of Japan; S. by Corea and China proper; and W. by a chain of mountains which separates it from Mongolia. It is watered by the great river Amour, and is almost as extensive as China proper, but is as little known to Europeans as central Asia. The inhabitants were originally nomades, but since they conquered China in 1644 their union with a civilized people has occasioned the introduction of agriculture and the arts, and a part of the nation now inhabit towns and villages. The race who at present occupy the throne in China originated in this country.

Island.] Saghalien is a large island, 450 miles long, from 40 to 130 broad, and separated from the continent by a narrow channel called the channel of Tartary. It appears to be thinly inhabited. The northern part is occupied by a colony of Mantchoos; at the southern extremity the Japanese formed a settlement which has been destroyed by the Russians, who, it is supposed, intend to form an establishment there themselves.

JAPAN.

Situation and Extent.] Japan is an extensive empire, consisting of several islands, lying between 31° and 42° N. lat. and separated from the eastern coast of Asia by the sea of Japan. The principal of these islands is Nippon, which is upwards of 700 miles long and on an average 30 broad. The two next are Sikoke and Kiu-siu. The large island of Jesso, immediately north of Nippon, has been colonised and governed by Japan, though it is scarcely reckoned an integral part of the empire. Several of the Kurile islands are also dependent on Japan. The extent of the three original islands may be computed at 90,000 square miles.

Face of the Country.] The coasts are rocky and precipitous, and the sea which surrounds them is full of shallows and whirlpools; so that there are few parts of the shore which can be approached with safety. The general aspect of the country is rugged and mountainous. Considerable plains indeed occur in some parts; but the greater portion of the fertile territory consists only of narrow vallies; while extensive tracts are naturally barren, and are made to yield the means of subsistence only by the most unremitting industry.

Climate. In consequence of the variety of surface, the climate is liable to extremes both of heat and cold. The thermometer in the southern part of the empire varies from 98° to 35° , and the ground is occasionally covered with snow. All the islands are exposed to volcanoes and earthquakes, which are often very destructive. In 1703 a part of Jedo, the capital, was swallowed up, and 100,000 persons perished.

Productions.] The mineral productions are copper, which is the finest in the world, and is the principal article of export; coal, in sufficient quantities to supply all the islands with fuel, and gold and sulphur in abundance. Pearls are also found in almost the whole circuit of the island of Sikoke. The principal vegetable products are the *rhus vernix* or varnish tree, affording a milky juice, with which the natives varnish, or as we call it *japan*, all their household furniture, dishes and plates. The mulberry tree, the tea shrub and the camphor tree are very common; and oranges, lemons, figs, apricots and peaches are abundant. Among cultivated vegetables rice takes the lead, and forms the main article of subsistence throughout the empire.

Agriculture.] Agriculture is conducted with the same care as in China. A great part of the soil indeed is hilly and irregular; but even the sides of the hills are formed by stone walls into terraces, many of which rise one above another, and are watered from reservoirs on the top.

Manufactures.] The principal manufactures are silk and cotton goods; but in the former they are excelled by the Chinese

and in the latter by the Hindoos. They excel both, however, in working metals, particularly copper and steel; and in lacquering and varnishing wood, called by us japanned ware, they are not equalled by any nation in the world.

Government.] The government presents a striking anomaly in the combined dominion of a spiritual and temporal ruler. The former, called the Dairi, was originally the sole sovereign and was regarded by his subjects almost as a divinity. This sacred character, however, obliged him to entrust the command of the army to others, and at the end of the 16th century, a distinguished general seized the whole secular power, and left to the Dairi only a shadow of dominion. The Dairi resides in the imperial city of Meaco, and has the revenue of the surrounding district allotted to him for the support of his establishment. The secular emperor is called Cubo Sama, and resides in pomp at Jedo. His power is absolute. The provinces are governed by princes who are appointed by the emperor, and whose power is also absolute.

Revenue and Army.] The revenue has been estimated at £28,000,000. The army maintained by the emperor is stated at 100,000 foot and 20,000 horse, while nearly triple that amount is kept on foot by the various princes and governors. Japan, however, is seldom engaged in foreign war, being separated from its neighbors by seas which neither party is in the habit of navigating.

Population and Religion.] The population is variously estimated from 15 to 30 millions. They are of Mongol origin, and in their religion and many of their customs they bear a strong resemblance to the Chinese.

Christianity.] Christianity was introduced into Japan by the Portuguese missionaries, about the middle of the sixteenth century, and at one time they counted a large number of converts, but the jealousy of the government being at length excited, orders were given that every missionary should leave the island, and at the same time a system of the most cruel persecution was commenced against their converts which lasted from 1590 to 1630, when the Portuguese and their religion were finally rooted out of Japan. This event is now annually celebrated in all the seaports, by publicly trampling under foot the cross and all the Catholic images.

Chief Towns.] Jedo, the capital, is situated on the east side of the island of Nippon, at the head of a great bay, in lat. 36° N. It is the residence of the secular emperor, and is scarcely surpassed in magnificence by any city in Asia. All the princes and great men are obliged to make it their residence for half the year. It is the seat of an extensive commerce, and contains many flourishing manufactures. The population is estimated at 1,000,000.

Meaco, the ecclesiastical capital, is situated about 200 miles W. S.W. of Jedo, in a spacious plain, which is surrounded by mountains and almost entirely formed into fine gardens, interspersed with temples, monasteries, and mausoleums. Meaco is the centre of all the literature and science of Japan. A number of the

finer manufactures, particularly japan-work, painting, carving, &c. are carried on here in greater perfection than in any other part of the empire. The population is said to be 530,000, of whom 52,000 are monks and nuns.

Nangasaki is a large sea-port, situated at the S. W. extremity of the island of Kiu-siu, and is the only point of the empire at which Europeans are permitted to carry on any trade. This permission is now entirely confined to the Dutch, who are allowed moreover to traffic only on a small scale, and under the most rigorous restrictions. They are confined to a small island, only 600 feet long and 120 broad, immediately adjoining the town of Nangasaki. It is also surrounded by a wall and has two gates, one of which, looking to the town, is always well guarded by the Japanese, and locked at night; the other looks to the harbor, and is open only when vessels are taking or discharging their cargoes.

Literature.] The Japanese are an intelligent and inquisitive people and acquire knowledge with great facility. They possess the art of printing; and engraving is also practised, though in a style inferior to that of Europe. The history of their own country is written with great care. Poetry is a favorite pursuit and they are passionately fond of music. They have extensive works on botany and zoology illustrated by plates. They are acquainted with the geography of the neighboring countries, and have accurate maps of Japan. They have also translated several European geographical works into their own language.

Character.] The people of Japan strongly resemble the Chinese in their external appearance, but in their moral qualities and dispositions they form a striking contrast. Energy, pride and a lofty sense of honor are prominent features. A general tone of frankness and good faith reigns in their deportment. Theft and fraud are said to be more rare than among almost any other nation. A disdain of mercantile occupations is a feature which they share with the nobility of Europe. The obligations of friendship and of social attachment are carried even to a romantic height. There is scarcely any peril to which a Japanese will not expose himself to serve or defend his friend. They are naturally of a kind and friendly disposition, and remarkably easy and courteous in their manners, but they cannot brook an insult, and many die by their own hands to avoid living in disgrace.

Manners and Customs.] The Japanese manners and customs are in many respects directly the reverse of those of Europeans. When we take off our hat, they take off their shoes; we rise up to receive a visitor, they sit down; we dislike to see a man's head bald, while they are at the greatest pains to extirpate the hair, leaving only a small tuft on the crown. They eat on the ground, upon mats of palm leaves, without either cloth, towel, knife or fork, but with two pieces of wood or ivory, which they use so skilfully that not a crumb falls to the ground. The dress consists of loose robes of silk or cotton, and this fashion has continued without alteration for two thousand years.

Commerce.] The people of Japan are even more averse to foreign intercourse than the Chinese. The empire was discovered in 1542, and the Portuguese immediately sent ships and formed a commercial connection with it, while their missionaries at the same time came hither with the view of converting the natives. This intercourse continued till the government, suspecting the missionaries were carrying on a plan for the subversion of the empire, commenced a persecution which ended in the extermination or expulsion from the island of all the Portuguese. They were succeeded, however, by the Dutch, who engaged, if they were allowed to trade, to interfere in no shape with the religion or government of the state. They at first carried on business to a great extent, and made very large profits, but restrictions have since been continually multiplying, till the annual profits are now less than £30,000, and if we deduct the losses at sea on this tempestuous coast, the expences of the establishment at Nangasaki, and those of an annual mission to the emperor, they will be reduced below £20,000. In 1795 the merchants had determined to represent to the emperor that it was no longer an object for them to continue the intercourse, and that unless a free trade were allowed, they would immediately withdraw themselves. Beginning to consider, however, that they would infallibly be taken at their word, and would lose all the little profit they made, they judged it most advisable to remain quiet. The Russians have made repeated attempts to open an intercourse with Japan, but their applications have always been rejected, the Japanese being peculiarly jealous of the Russians and the English. The imports into Japan consist of sugar, coffee, spices, glass, iron-ware, lead, tin, and India goods. Of the returns, nine tenths are made in copper; to which is added lacquered ware and some other trifles.

ASIATIC ISLANDS.

Name and Situation.] The term Asiatic islands is applied by way of distinction to those islands which lie between New Holland and New Guinea on the S. E. and Asia on the N. W. They include 5 groups, viz. 1. The isles of Sunda, the principal of which are Sumatra, Java, Banca and Timor. 2. Borneo, and the small islands adjacent. 3. The Philippine islands, the principal of which are Lucon and Magindanao. 4. Celebes. 5. The Spice islands or Moluccas, the principal of which is Gilolo.

Situation of the Groups.] Borneo and Celebes are in the centre; the Philippine islands in the north; the Spice islands in the east, between Celebes and New Guinea; and the isles of Sunda in the south. The China sea separates these islands from the continent.

I. THE ISLES OF SUNDA.

SUMATRA, the most westerly of the Sunda isles, is about 700 miles long from N. W. to S. E. and the area is commonly estimated at 180,000 square miles. The equinoxial line passes nearly through the centre. It is separated from the peninsula of Malaya by the straits of Malacca, and from the island of Java, by the straits of Sunda. A ridge of mountains extends through the whole length of the island, the highest summit of which, called Mount Ophir, rises in the middle of the island to the height of 13,482 feet above the level of the sea. The climate is not so hot as would naturally be expected, the thermometer seldom rising above 85° . The soil is fertile and produces in abundance all the richest fruits of the torrid zone. The productions of most value for exportation are pepper, gold dust and camphor.

The population has been estimated at 4,500,000. The inhabitants on the coast are Malays; but those in the interior are cannibals, and it is said devour their friends as well as their enemies. When a man becomes aged and infirm, he invites his children and friends to come and eat him. He ascends a tree, round which his friends assemble, and join in a funeral dirge, the import of which is "The season is come, the fruit is ripe, and must descend." After this the old man descends, and is eaten by his children.

The principal places on the island in the possession of Europeans are *Bencoolen*, a British settlement on the western coast, in lat. $3^{\circ} 50'$ S.; *Padang*, a Dutch settlement, in lat. $0^{\circ} 48'$ S.; and *Palembang*, also a Dutch settlement, and the capital of a kingdom of the same name, lying in the S. E. part of the island, along the straits which separate Sumatra from Banca.

JAVA is a large island lying S. W. of Sumatra, between 6° and 9° S. lat. It is 642 miles long from E. to W. and the area is estimated at 52,000 square miles. The island is divided nearly in its whole length by a range of mountains running E. and W. and rising to its greatest height near the centre. The northern coast is low and swampy, and intersected by a number of rivers and fine bays; but the south coast, as far as it has been explored, rises into high and rugged hills and is almost inaccessible. The climate along the northern coast is hot and sultry, the thermometer at Batavia seldom falling below 76° of Fahrenheit, but in the high country of the interior it frequently descends to 60° and all the common productions of Europe may here be cultivated with success. Java possesses a soil of extraordinary fertility, and in no part of the world is vegetation more luxuriant. The staple production is rice, which is cultivated along the whole northern coast, and is brought to Batavia, and exported in great quantities. Sugar, to the amount of 10 million pounds annually, is made as well for home consumption as for exportation. Most of the sugar mills are owned by the Chinese. Pepper, indigo, cotton and coffee are also raised in great abundance and perfection.

The population is estimated at 4,230,000, and consists principally of Javanese, particularly in the interior; but there are numbers of Chinese, Malays, Arabs, Hindoos, negroes, and Europeans in the districts on the coast. The commerce of the island is chiefly in the hands of the Dutch, who have under their dominion more than half the population. Java was taken by the English in 1811, but has since been restored to the Dutch.

Batavia, on the N. W. coast, is the capital of the island and of all the Dutch or, as they are now called, Netherland East-India possessions. It was formerly a place of immense trade, and contained 160,000 inhabitants, but the climate is extremely unhealthy, and the population is now reduced to 47,000.

BANCA is a large island lying E. of Sumatra and separated from it by the straits of Banca. It belongs to the Dutch, and is chiefly celebrated for its mines of tin, which yield about four million pounds annually.

SUMBAWA, lying east of Java, is celebrated for the tremendous volcano of Tomboro. The eruption in 1815 is the most terrible on record. The explosions were heard at the distance of more than 900 miles, and the ashes fell in such quantities as to produce total darkness at the distance of 200 miles.

TIMOR, the most eastern of the Sunda isles, is about 200 miles long and 30 or 40 broad, and is rich in all the choicest productions of tropical climates. The Dutch and Portuguese have settlements here.

II. BORNEO.

Borneo, the largest island in the world, except New Holland, is in the centre of the Asiatic islands, and is intersected by the equator. It is 800 miles long, and is supposed to contain more than 300,000 square miles. The coasts are low and swampy. The interior is almost wholly unknown to Europeans. The commerce of the island is principally in the hands of the Chinese, who export gold, diamonds, pepper, camphor, and edible bird's nests which are regarded in China as a great delicacy. Borneo produces also the ourang-outang, a singular animal bearing a striking resemblance to the human species. It is of short stature, scarcely exceeding three feet in height, with slender limbs and a broad and naked face, though the rest of the body is profusely covered with hair. When taken young it becomes extremely gentle and docile, and much attached to those around it. It sheds tears when displeased, rolls on the floor, and beats its head against it with all the gestures of a passionate child. The population of the island is estimated at 3,000,000.

Borneo, the capital of a kingdom of the same name, in the N. W. part of the island, is on a river 10 miles from the sea. The houses are built over the water and supported on posts, and the inhabitants communicate with each other entirely by boats. Alligators lurk below to prey on the offals dropping through the

lattice work of the floor. This mode of building cities is not uncommon in this part of Asia.

III. PHILIPPINE ISLANDS.

These islands lie N. E. of Borneo, and stretch from 5° to 20° N. lat. They are more than 1,200 in number, and belong chiefly to the Spaniards, who have small settlements on many of them. The productions are rice, cotton, tobacco, coffee and many other tropical fruits. Gold, iron, copper, lead and other minerals are also found in the mountains. The population is estimated at 3,000,000, more than half of whom are subject to the Spaniards.

LUCON the largest island, is situated at the northern extremity of the group, and contains about 70,000 square miles. *Manilla*, the capital of the island and of all the Philippines, is on the S. W. coast and has a fine harbor and considerable commerce.

MAGINDANAO, the next largest island and the most southerly of the group, contains about 30,000 square miles. The Spaniards have settlements along the northern coast but all the rest of the island is under independent chiefs. The inhabitants are much given to piracy, and even depend on it as a resource for subsistence. They cruise among the Philippines, where they attack merchant vessels, and frequently extend their depredations to Java, Sumatra, Borneo and Celebes.

The **SOOLOO ISLES** are a cluster of small islands, about 60 in number, lying between Magindanao and Borneo, and deriving their name from Sooloo, the principal island in the group. They are not commonly reckoned among the Philippine islands. The inhabitants are pirates and carry on an unceasing warfare with the Spanish colonies in the Philippines.

IV. CELEBES.

Celebes, sometimes called Macassar, is a large island intersected by the equator, and lying east of Borneo, from which it is separated by a channel or arm of the sea called the straits of Macassar. It is of a very irregular figure, consisting of four long narrow peninsulas, separated from each other by deep bays. The area is estimated at 90,000 square miles. Among its productions are gold, beautiful timber, rice, cotton and most of the staple products of the East Indies. The inhabitants are of Malay origin, strongly attached to a sea faring life and much addicted to piracy. The Dutch have many forts along the coast, and the island is regarded as the key to the Moluccas. *Macassar*, the principal settlement of the Dutch, is on the S. W. coast. It is a flourishing settlement, and carries on a direct trade with China.

V. SPICE ISLANDS OR MOLUCCAS.

The Moluccas include all the islands between New Guinea and Celebes. They belong to the Dutch, and are celebrated, as their name indicates, for the richest spices. Cloves and nutmegs grow here in perfection, and the rareness and great value of this produce have given rise to much contention among the principal European nations for the possession of these islands. The Portuguese first visited them in 1510, and held them till they were conquered by the Dutch in 1607. During the late European war they fell into the hands of the English, but are now restored to the Dutch. The following are the principal islands:

1. *Amboyna*, situated near the S. W. extremity of Ceram, in lon. $128^{\circ} 5' E.$ lat. $3^{\circ} 40' S.$ is a small island containing only 450 square miles, but it is the chief of the Moluccas, being the residence of the governor, and contains 45,000 inhabitants. It is celebrated for its clove trees which yield 650,000 pounds annually. The districts appropriated to the cultivation of the clove are strictly limited by the government, and the sovereigns of some of the neighboring islands have been compelled to destroy their plantations that the Dutch might enjoy a monopoly.

2. *Ceram*, lying under the parallel of $3^{\circ} S.$ lat. contains 4000 square miles.

3. *Gilolo*, the largest of the group, is of a very irregular figure, and is intersected near its southern extremity by the equator.

4. The *Banda islands*, ten in number, lie about 130 miles E. S. E. of Amboyna. Their chief produce is nutmegs, for the cultivation of which four of the islands are laid out in plantations. The cultivation is allowed only in these four islands. In all the others care is taken to extirpate the tree.

 AUSTRALASIA.

Situation.] Australasia, the fifth great division of the globe, consists of numerous islands lying southeast of the Asiatic islands. The largest is New Holland, which by some geographers is termed a continent. The other islands are New Guinea, New Britain, New Ireland, Solomon's islands, New Hebrides, New Caledonia, New Zealand and Van Diemen's land, together with a multitude of small isles surrounding them in all directions. New Guinea is separated from the northern coast of New Holland by Torres' straits, and Van Diemen's land from the southern coast by Bass's strait. The rest of the islands lie east of these and of New Holland.

NEW HOLLAND.

Situation and Extent.] New Holland, the largest island in the world, extends from 10° to 39° S. lat. and from 113° to 153° E. lon. It is 2600 miles long from E. to W. between Sandy cape and the entrance of Shark's bay, and the area is estimated at 3,000,000 square miles.

Coast.] Our knowledge of New Holland is almost confined to the coast. The Dutch discovered the island in 1606, but it is only within the last 50 years that any serious attempts have been made to increase our knowledge of the country. In 1770 Capt. Cook explored the eastern coast; and by various expeditions, fitted out by the British government between 1795 and the present time, a complete survey has been made of the whole coast, except 8 or 9 degrees of latitude in the N. W. The position of every important point has been ascertained, and all the inlets and bays have been traced to their conclusion. The most remarkable result of this survey is, that the mouth of no large river has been discovered in the whole circuit of the island. Off the east coast there is a singular barrier of coral reefs, extending in a N. W. direction, parallel with the shore at the distance of 20 or 30 leagues, from about 23° S. lat. to Torres' straits in lat. 10° S. a distance of 840 miles.

New South Wales.] The country along the eastern coast of the island for an indefinite extent is claimed by the British, and is called by them New South Wales. All the settlements yet made are in the S. E. on a narrow belt of land included between the coast and a lofty range of hills, called by the colonists the Blue mountains. *Sydney*, the capital of the colony, is on Port Jackson bay in lat. $32^{\circ} 53'$ S. and contains 7,000 inhabitants. All the other towns are within 60 miles of Sydney. The climate is healthy and pleasant, and favourable to the growth of wheat, maize, and barley, as well as oranges, lemons and other tropical fruits.

The colonists are principally convicts, banished from Great Britain for their crimes; but within a few years voluntary emigrants of industrious habits have resorted hither in considerable numbers; and the population and wealth of the colony are now increasing with astonishing rapidity. According to an official return in 1818, the inhabitants were 25,050 in number, and owned more than 200,000 sheep, 55,000 horned cattle, 3,600 horses and 24,000 hogs. The increase of the population during the single year 1818 was nearly 5,000, or one fifth of the whole.

Interior.] No attempts were made to cross the Blue mountains for the purpose of exploring the interior of the island until the year 1813. Since that time several expeditions have been undertaken by the British, particularly two, in 1817 and 1818, under lieut. Oxley. He ascertained that several large rivers rise on the west side of the Blue mountains, and succeeded in tracing their course for many hundred miles. They appear

to terminate, however, in immense swamps or inland lakes. From the result of these expeditions, and from the fact that no river of magnitude enters the ocean from any part of the coast, it appears highly probable that the surface of this vast country resembles a shallow basin, whose margin is the sea coast, from which the waters, descending towards the interior, form a succession of swamps and morasses, or perhaps a vast mediterranean sea.

Inhabitants.] The natives of New Holland, so far as they are known, are among the most degraded of the human species. They are ugly and dirty. Their noses are flat, their lips thick, their mouths stretch from ear to ear; they eat worms and caterpillars, and rub their bodies all over with fish oil, which in hot weather makes them intolerably offensive. They have no regular religion, but are a poor superstitious race, believing in ghosts and witches.

VAN DIEMEN'S LAND.

Van Diemen's land is a fertile island, about 170 miles long and 150 broad, separated from the south coast of New Holland by Bass's straits. The British planted a colony here in 1803 which is now very flourishing. In 1818 it contained 3,557 persons, of whom about one half were convicts from England and New South Wales.

NEW GUINEA.

New Guinea, sometimes called Papua, lies north of New Holland, from which it is separated by Torres' straits. It is about as large as Borneo, but much longer, being more than 1200 miles in extent from N. W. to S. E. The coast has been very little explored, and it is supposed by many that it is not a single island, but a great number of islands divided by narrow straits. The shores abound with cocoa trees, and in some parts with nutmeg trees, and as far as it is known it appears to be a beautiful country. The inhabitants are negroes, of a savage and hideous appearance. There is no European settlement upon the island.

NEW BRITAIN, NEW IRELAND AND SOLOMON'S ISLANDS.

These islands lie east of New Guinea, and appear to have a fertile soil, rich in all the products of tropical climates. The inhabitants are negroes, of the same general appearance and character with those of New Guinea. The Europeans have no settlements here.

NEW HEBRIDES AND NEW CALEDONIA.

These islands lie S. E. of New Guinea. New Caledonia is a large but barren island extending from 20° to $22^{\circ} 30'$ S. lat. The inhabitants are negroes resembling those of New Guinea; they go almost naked and are cannibals. The New Hebrides consist of numerous clusters of islands extending from 13° to 21° S. lat. Many of them have a fertile soil and are covered with a flourishing vegetation. The Europeans have no settlements here.

NEW ZEALAND.

New Zealand consists of two large islands, extending from 34° to 48° S. lat. and from 166° to 179° E. lon. and separated from each other by a strait 12 or 15 miles broad. The area is estimated at 90,000 square miles. The most valuable production is a species of flax which has a beautiful silky appearance, and seems to be peculiar to this island. The natives are a noble race of men. They are as tall as the tallest Europeans, with perfectly regular features; they have also uncommon sagacity and strength of mind. Their principal faults arise from a fierce and warlike disposition. War is their glory and the principal topic of conversation; they believe that the soul, as soon as it is parted from the body, is engaged in war. They are cannibals, and when provoked are very ferocious; but their natural disposition is kind, affectionate and generous. Two English settlements have recently been made here for the purpose of introducing the blessings of civilization and the knowledge of Christianity. A seminary has also been established at Parramatta, in the British colony of New South Wales, for the instruction of the New Zealanders in spinning, weaving, reaping and the other simple arts of life. In 1820 it contained 25 pupils. They enter with much spirit into the views of their benefactors and manifest a strong desire for improvement.

POLYNESIA.

Name and Situation.] Polynesia is derived from two Greek words, signifying many islands. It embraces the numerous islands in the Pacific ocean lying east of the Philippine islands and Australasia. The principal groups are the Pelew islands, the Caroline islands, the Ladrões, and the Sandwich islands, lying north of the equator; and the Friendly islands, Navigator's islands, the Society islands, and the Marquesas, south of the equator. Some geographers do not adopt the terms Polynesia and Aus-

tralasia, but include all the islands of both divisions under the more general name of Australia.

PELEW ISLANDS. These islands, about 18 in number, lie east of the Philippines, near lat. 8° N. and lon. 134° E. In 1783, Capt. Wilson, commander of the *Antelope* packet, in the service of the East India company, was shipwrecked here. He describes the natives as mild, and simple in their manners, and hospitable, but they have no religion, though they appear to believe that the soul survives the body. None of the islands which the English visited had any kind of grain nor any quadruped whatever, except a few rats and meagre cats. After the return of Capt. Wilson, the East India company presented the king, in return for his kindness, a number of cows, goats, pigs, ducks and geese, all which have greatly increased.

CAROLINE ISLANDS. The Carolines consist of several groups, lying east of the Pelew islands, and stretching from 138° to 160° E. lon. and from $7^{\circ} 40'$ to 11° N. lat. They are claimed by the Spaniards, and are inhabited by a mild and friendly people.

LADRONES OR MARIANA ISLANDS. The Ladrões are 16 in number, and lie north of the Carolines, between 13° and 20° N. lat. The inhabitants are tall, robust, active and very ingenious. Their vessels, called by English seamen flying prows, will sail with a brisk wind at the rate of 20 miles an hour, and the skill manifested in their construction is a subject of admiration with European architects. These islands are the resort of pirates who infest the mouth of Canton river, and have long set the whole naval power of the Chinese at defiance.

SANDWICH ISLANDS. This cluster consists of 9 or 10 islands, lying between $18^{\circ} 50'$ and $22^{\circ} 20'$ N. lat. and between $154^{\circ} 55'$ and $160^{\circ} 15'$ W. lon. The principal islands are Owhyhee, Mowee, Woahoo, Atooi, Morotoi, Ranai, and Oneehow. The number of square miles in the whole group is estimated at 6,000, of which Owhyhee contains 4,000, and Mowee, Woahoo and Atooi, more than 500 each. The population is estimated at 400,000.

These islands were discovered in 1773 by Capt. Cook and Capt. King. The natives are generally well made, and above the middle size. During the short time since they became acquainted with Europeans, they have made very rapid advances in civilization. Several Europeans have been encouraged to reside in the islands and have communicated a knowledge of some of the useful arts. The worship of idols, and the sacrifice of human victims were formerly universally prevalent, and so deeply rooted were these pagan customs, that their abolition was pronounced hopeless. A most astonishing change, however, has recently taken place. In 1819, the government and people almost unanimously determined to abandon their idols, and to commit them with all the

monuments of idolatry to the flames. This was done at Owhyhee, at then Woahoo, and then at Atooi without the least opposition. Before the news of this revolution reached America, the American Board of Commissioners for Foreign missions had resolved to establish a mission in these islands, and the missionaries had already embarked at Boston. The whole number of persons constituting the mission was 22, viz. 2 ordained missionaries, 2 catechists and schoolmasters, a farmer, a printer, and their wives and families; together with three natives of the Sandwich islands, who had been educated at the Foreign mission school in Cornwall, Connecticut. Accompanying the mission also was George Tamoree, son of the king of Atooi, who likewise received his education at the Foreign mission school. The missionaries on their arrival were well received, and their prospects of usefulness are very encouraging.

FRIENDLY ISLANDS. This cluster lies east of the New Hebrides, and if we include the Feejee islands, extends from 175° to 185° E. lon. and from $15^{\circ} 30'$ to $21^{\circ} 30'$ S. lat. The principal island in the group is Tongataboo. The Feejee islands, Annamooka, Vavaoo, and the Hapae islands are also important. The inhabitants were formerly represented as possessing many social qualities and much gentleness of character, but the accounts of recent visitors prove them to be capable of the greatest excesses of cruelty and revenge.

NAVIGATOR'S ISLANDS lie N. E. of the Friendly islands, between 169° and $172^{\circ} 30'$ W. lon. and below lat. $11^{\circ} 25'$ S. They are about 10 in number and derive their name from the habits of their inhabitants, who live almost constantly in their canoes.

SOCIETY ISLANDS. These islands, 13 in number, lie east of the Friendly islands, between 16° and 18° S. lat. Otaheite, the largest of the group, is 120 miles in circumference. Among the rest Ulie-tea, Bolabola, Tubai, Maitea, Huaheine and Eimeo are also important. The climate of these islands is mild, the soil fertile, and the vegetation so luxuriant that they have been called the garden of Australia. Among the productions are bread-fruit, bananas, cocoa-nuts, yams and sweet potatoes, all of which grow spontaneously.

The number of the inhabitants is estimated at 100,000. They are tall, strong and well built, particularly the chiefs, few of whom are under six feet in height. They were formerly idolaters, and practised infanticide, the sacrifice of human victims and many other cruel and degrading superstitions, but during the last 8 or 10 years a great change has taken place. In the years 1796 and 1800 the London Missionary Society sent out a number of missionaries to instruct the natives in the Christian religion. For a long period they labored with very little success, the number of converts in 1814 being only about 50. From this time, however, accessions were rapidly made, until at length all the

inhabitants of Otaheite, Eimeo, and several of the adjacent islands, with very few exceptions, renounced idolatry and embraced Christianity. They have in consequence relinquished their former cruel customs, and now regularly assemble in congregations of 400 or 500, decently attired, for the purpose of Christian worship. About 6,000 in the several islands have learned to read in the Tahitian language, which the missionaries have given them in a written form. Schools have been established, many of the useful arts have been introduced, and the despotic power of the sovereign, himself a baptised convert of the missionaries, has been limited by a code of laws.

The **MARQUESAS** are a cluster of small islands lying N. E. of the Society islands. They extend from $138^{\circ} 45'$ to $140^{\circ} 30'$ W. lon. and from $8^{\circ} 30'$ to $10^{\circ} 30'$ S. lat. Various accounts are given of the soil of these islands, but all navigators agree that the inhabitants are remarkable for the beautiful form of their bodies and the regularity of their features. They are all strong, tall and extremely active. The population is estimated at 50,000.

AFRICA.

Situation and Extent.] Africa is bounded N. by the Mediterranean sea, which separates it from Europe; N. E. by the Red sea, which separates it from Asia; S. E. by the Indian ocean; and W. by the Atlantic. It extends from lat. 34° S. to $37^{\circ} 30'$ N. and from lon. 18° W. to 51° E. The area is estimated by Hassel at 11,652,442 square miles.

Divisions.] Africa is divided into a great many petty kingdoms, but they may be conveniently classed under 5 divisions. 1. *Northern Africa*, or the countries on the coast north of the tropic of Cancer; viz. Egypt, Barca, Tripoli, Tunis, Algiers, and Morocco. 2. *Eastern Africa*, or the countries on the eastern coast between the tropic of Cancer and the tropic of Capricorn; viz. Nubia, Abyssinia, and the small states south of Abyssinia. 3. *Southern Africa*, or the countries south of the tropic of Capricorn. 4. *Western Africa*, or the countries on the west coast between the tropics. 5. *Central Africa*, or the countries in the interior between these four divisions.

Isthmus and Straits.] The isthmus of *Suez* separates the Red sea from the Mediterranean, and connects Asia with Africa. The straits of Gibraltar connect the Mediterranean with the Atlantic. The straits of *Babelmandel* connect the Red sea with the Indian ocean.

Capes.] Cape *Guardafui* is the most eastern point of Africa; cape *Serra*, the most northern; and cape *Verde*, the most western.

The cape of *Good Hope* is near the southern extremity; and capes *Blanco* and *Bojador* are on the western coast north of cape Verde.

Mountains.] The *Mountains of the Moon* commence near cape Guardafui, and running in a westerly direction completely across the continent, terminate at cape Verde. The eastern part of the chain is called also the *Abysinian Alps*, and the western part, the *mountains of Kong*. The central part has never been explored by Europeans, and the continuity of the chain cannot be considered as fully established.

The *Mount Atlas chain* commences on the western coast near cape Bojador in lat. $26^{\circ} 16'$ N. and running at first in a north-easterly and afterwards in an easterly direction, passes through Morocco, Algiers, Tunis, Tripoli and Barca to the borders of Egypt. The highest and broadest part of the range is in the kingdom of Morocco, where it rises in some places to the height of 13,000 feet above the level of the sea. As it proceeds eastward through Algiers, it preserves its breadth but is less elevated, and in Tripoli and Barca it becomes narrow and gives birth to fewer streams.

Rivers.] The *Nile* rises in the mountains of the Moon, under the name of the Bahr el Abiad or White river, and after running for some distance in an easterly direction along the foot of the mountains, turns to the north and receives its two principal tributaries, the Abawi or Bahr el Azrek and the Tacazze, after which it pursues a circuitous course through Nubia, and near the frontier of Egypt forms two cataracts, the lowest of which is at Syene. Below the cataracts it continues its course in a northerly direction for 500 miles, till a little below Cairo it divides and discharges itself into the Mediterranean through two principal channels, which inclose between them what is called the Delta of the Nile.

The *Niger*, called also the *Joliba*, and by the Moors the *Nile el Abeede*, or *Nile of the negroes*, rises in the mountains of Kong, and flowing in a northeasterly direction passes near lon. 1° W. through lake Dibbie, beyond which the river has never been traced by a European. The various and contradictory rumors relative to its course and termination have excited an extraordinary degree of interest in Europe, and many expeditions have been recently fitted out for the sole purpose of determining this question. After the discoveries of Park, who traced the river through the early parts of its course, the opinion which became generally established, was that of Major Rennell, coinciding in some measure with the previous one of D'Anville, by which the Niger, after issuing from lake Dibbie, was supposed to flow eastward through the country of Houssa, and finally to lose itself in the lakes and marshes of Wangara. A very different hypothesis has been started by travellers into Northern Africa. Jackson and Hornemann both state the universal conviction there to be, that the Niger flows eastward and joins the Nile, being in fact the Nile itself. The Moors express their astonishment when they hear Europeans doubting the identity of the two streams.

Notwithstanding these testimonies, however, this opinion has been decidedly rejected by the ablest geographers. A more recent hypothesis, the fame of which has nearly absorbed every other, is that by which the Niger is supposed, after a long course to the south, to discharge itself into the Atlantic through the Congo or Zaire, which empties in lat. 6° S. This opinion is founded on the vast quantity of water which that river pours into the ocean, and on the fact that a great rise takes place at a period when no rains have fallen on the south side of the line. These arguments had so much weight with the British government, that they determined, in 1816, to fit out an expedition on a great scale, to settle this grand question in modern Geography. It was divided into two parts, one of which, of a military character, was commanded by major Peddie, and was destined to penetrate across the country to the Niger, and to descend its stream; the other, of a naval description, under captain Tuckey, was to ascend the Congo in boats. The hopes which were raised of the success of this expedition have been sadly disappointed. The party of captain Tuckey, overcome by fatigue and the heat of the climate, were seized with a pestilential disorder, which proved fatal to most of them. All the leaders of that of major Peddie fell also a sacrifice to the climate, before they had even approached the Niger.

The *Senegal* rises in the mountains of Kong, near the sources of the Niger, and flowing in a northwesterly direction, discharges itself into the Atlantic ocean under lat. 16° N. after a course of more than 1,000 miles.

The *Gambia* rises also in the mountains of Kong, and discharges itself into the Atlantic under lat. $13^{\circ} 30'$ N. after a course of about 600 miles, for 400 of which it is navigable.

Deserts.] Africa is distinguished from the other quarters of the world by its immense sandy deserts. The *Sahara* or *Great Desert* stretches from the Atlantic on the west, with few interruptions, to the Nile on the east, a distance of 3,000 miles; and from the Barbary states on the north to the countries watered by the Niger on the south, a distance of 800 or 1,000 miles. It is thus by far the most extensive desert in the world, and presents, almost throughout, the spectacle of a naked, burning plain of sand, destitute alike of water and vegetation, except in the few fertile spots, called oases, which are occasionally interspersed, and serve as resting and watering places for the caravans in their journeys over these dreary wilds. When the caravans are disappointed in finding water at these places, in consequence of a peculiarly dry season, they frequently die from thirst. In 1805 a caravan of 2,000 men and 1,800 camels entirely perished.

EGYPT.

Situation and Extent.] Egypt is bounded N. by the Mediterranean; N. E. by Asiatic Turkey; E. by the Red sea, which separates it from Arabia; S. by Nubia; and W. by the Libyan desert. It lies between 22° and 32° N. lat. extending along the banks of the Nile for about 700 miles, from its mouth upward. It nominally comprehends also a breadth of 200 or 300 miles, from the Red sea to an ill defined boundary in the Libyan desert, but the only territory of any value is that lying immediately on the banks of the river. The area is estimated at 190,000 square miles, of which only 19,000, or one tenth part of the whole, is capable of cultivation.

Divisions.] The cultivated region is divided by nature into two parts; Lower Egypt, composed of the Delta of the Nile; and Upper Egypt, which extends more than 500 miles along the river above its separation.

Face of the Country.] Upper Egypt consists of a long, narrow belt of land, intersected by the Nile, and interposed between two parallel ranges of mountains, which stretch along the opposite sides of the river, usually at the distance of 8 or 10 miles from the banks. As they approach Lower Egypt the two chains, still following the course of the river, diverge from each other, one branch running in a N. W. and the other in a N. E. direction to the Mediterranean. The country beyond the mountains, both to the east and west, is a sandy desert.

River.] The Nile is the only river in Egypt, and its overflows are the source of all its fertility. The rise of the river begins about the middle of June and continues till the beginning of September, when it is at its height, and all the level parts of the country are overflowed. The waters then gradually retire, and leave behind them a thick mud or slime which is peculiarly fertilizing. It is a clayey substance, and is capable of being formed into bricks, and also into pipes or vases of different kinds. The water of the Nile is peculiarly light and wholesome, but during the inundation it becomes muddy, and cannot be drunk without being clarified. The cause of the inundation is the periodical rains, which fall in Abyssinia from June to September. The river is navigable to the borders of Nubia for vessels of 60 tons.

Lakes.] The coast is lined by lakes or lagoons, separated from the sea by long, narrow sand banks. That of *Mareotis* or *Alexandria*, the most western, is not more than 18 inches deep in winter, and in summer is quite dry. *Lake Menzaleh*, the largest and most eastern, is nearly 50 miles long and 12 broad. It communicates with the sea through several narrow inlets.

Climate.] The climate is characterized by the entire absence of rain; when a few drops fall they are viewed by the inhabitants almost as a miracle. Thunder and lightning are almost equally rare. The prevalent winds are from the north, but is

the spring, for about fifty days, Egypt is liable to the simoom, a terrible wind from the desert, which from its intense heat and dryness, threatens, when long continued, almost the extinction of animal life; fortunately, however, it seldom lasts above three days. The heat of summer is more intense in Egypt than in other countries under the same latitude. This circumstance, with the want of cleanliness and of all precaution, probably generates the plague, a malady which is supposed to be indigenous in this country, and to spread its ravages from thence as from a centre. The ophthalmia, a severe disease affecting the eyes, is also peculiar to Egypt, but the cause of it is not yet satisfactorily ascertained.

Agriculture.] The lands inundated by the Nile require scarcely any labor; the ground, softened by long moisture, requires only to be slightly stirred, and the seed being thrown in, sinks by its own weight, and produces abundantly. Great attention, however, is everywhere paid to irrigation. In Upper Egypt, where the river is confined within high banks, the water does not overflow, but is raised by artificial means, and distributed over the lands. In Lower Egypt there are numerous canals, dug by human labor, which intersect the country in every direction and everywhere circulate the waters of the inundation.

Productions.] The soil produces the fruits both of the torrid and temperate zone. Corn and rice grow in perfection in the Delta, while wheat and barley flourish in Upper Egypt. The best fruits are the orange, the lemon, the citron, the apricot and the tamarind.

Chief Towns.] *Cairo* or *Grand Cairo*, the capital of Egypt, is near the east bank of the Nile, with which it is connected by a canal, about 10 miles above the upper angle of the Delta. The streets of this famous city are narrow, crooked, unpaved, and interspersed with large, open spaces, which become lakes during the inundation of the Nile, and are gardens during the rest of the year. It is the most populous city in Africa and carries on an extensive commerce, by means of caravans, with Syria, Arabia, Abyssinia, the Barbary States and the interior of Africa. The city contains 300 mosques, all adorned with lofty minarets, and 300,000 inhabitants.

Alexandria is situated 125 miles N. W. of Cairo, on the long and narrow neck of land included between lake Mareotis and the Mediterranean. It has two harbors and communicates with the western arm of the Nile by a canal, which at once supplies the city with water, and affords facilities to its commerce with the interior. This city was founded in the year 331 before Christ, by Alexander the Great, who conceived the grand idea of making it the centre of commerce to all the three continents. For many centuries it engrossed the trade of India, the goods being brought up the Red sea, and carried across to the Nile, where they were embarked and conveyed down the river and through a canal to the city. Alexandria became, at the same time, the centre of science, and was distinguished for its immense library, and for na-

merous splendid architectural monuments, many of which still remain, particularly Pompey's pillar, the two obelisks called Cleopatra's needles, the catacombs, and the reservoirs for the supply of the city with water. In the height of its splendor it is said to have contained 600,000 inhabitants; now, the population is estimated at only 10 or 15,000.

Rosetta is situated on the great western arm of the Nile, called by the ancients the Bolbitine, within a few miles of its mouth. It is a handsome city and contains 12,000 inhabitants. The maritime trade of Egypt is carried on principally from Alexandria; but Rosetta forms the medium of communication between that city and Cairo.

Damietta is situated on the great eastern arm of the Nile, called by the ancients the Phatnitic, 6 miles from its mouth. It carries on an extensive commerce with Syria, Cyprus, and other parts of the Turkish empire, but suffers for want of a harbor, vessels being obliged to lie in the road at the mouth of the river, where they are exposed to all winds. This arm of the Nile is also becoming annually shallower, and it is feared that in a few years it will cease to be navigable for boats of large burden. The country around Damietta is a perfect garden and the rice is the finest in Egypt. The population is estimated at 40,000.

Suez is on the gulf of Suez, at the northern extremity of the Red sea. It is in the midst of a desert, and from the tops of the houses the eye cannot discern a single tree or the smallest spot of verdure; yet it is a place of considerable commerce, being visited by the caravans, and several vessels being employed in the navigation between this port and Jidda in Arabia. The population is estimated at 5,000.

Cosseir is a port on the coast of the Red sea, 300 miles south of Suez, in lat. $26^{\circ} 8' N$. The harbor is inconvenient, and the country in the vicinity frightfully desolate, but the place is important as forming the principal point of communication between Egypt and Arabia.

Kene or *Kenne*, the centre of the trade of Upper Egypt, is on the Nile, almost due west of Cosseir, from which it is 120 miles distant. Most of the goods destined for India were formerly brought up the Nile in boats to Kene, whence they were carried over land to Cosseir, and embarked on the Red sea, but this commerce has now greatly declined. The town is now chiefly supported by the great caravan from Western and Central Africa, which passes annually through it, bringing numerous pilgrims destined for Mecca and Medina.

Siut or *Siout*, on the west bank of the Nile, in lat. $27^{\circ} 16' N$. is the rendezvous of the caravans which proceed from Egypt southward into the interior of Africa. It is also remarkable for the spacious excavations made in the neighboring mountains, supposed to be sepulchres. The population is about 25,000. *Girge*, on the Nile, in $26^{\circ} 20' N$. lat. was formerly the capital of Upper Egypt, but is now in a state of decline.

Luzor, on the east bank of the Nile, in lat. $25^{\circ} 30' N.$ occupies part of the site of ancient Thebes. This celebrated city extended along both banks of the Nile and was 27 miles in circumference. Its magnificent ruins are now scattered over this whole space, and recent travellers represent it to be impossible by any description to give an idea of the grandeur of the scene. The ruins consist of a vast assemblage of temples, columns, obelisks, colossal statues and sphinxes, paintings, sculptures, tombs excavated from the rock, and other astonishing specimens of the power and skill of its ancient inhabitants. The bust of Memnon, consisting of a single mass of stone weighing 10 or 12 tons, has been recently sent from this place to England by Mr. Belzoni.

Esne, on the Nile, in lat. $25^{\circ} 17' N.$ is chiefly remarkable for the ruins of the ancient Latopolis, of which it occupies the site. *Syene* or *Assuan*, on the E. bank of the Nile, in lat. $24^{\circ} N.$ is celebrated for the well which was sunk by the ancient Egyptians to mark the time of the summer solstice.

Antiquities.] The objects which, above all others, attract the attention of the traveller in modern Egypt are the stupendous monuments of ancient grandeur with which it is covered. The ruins of Babylon, and of other capitals which were once the glory of Asia, are distinguishable only by enormous piles of rubbish accumulated upon their site. The masterpieces of Grecian and Roman architecture have reached us in a very shattered and imperfect condition; but the edifices of Egypt, which ascend to an era prior to any record of authentic history, bear scarcely any marks of the thousands of years that have passed over them, and display to us entire the arts and the power of the first generations of men.

The most gigantic of these monuments are the pyramids, which commence immediately south of Cairo, but on the opposite side of the Nile, and extend in an uninterrupted range for many miles in a southerly direction, parallel with the banks of the river. They are built on a hard, rocky plain, which is elevated 80 feet above the territory inundated by the river. The three principal pyramids are situated in the neighborhood of the village of Geeza, at the northern extremity of the range. The base of the largest is 693 feet square, covering an area of a little more than eleven acres; the perpendicular height is 499 feet. The external part is chiefly built of great square stones, compacted together solely by their own weight, without lime, lead or cramps of any metal. At first view the pyramids present the appearance of solid masses; and it seems to have been the intention of the founders, that the openings which they contain should remain perpetually closed. The ingenuity of successive ages, however, has succeeded in finding the entrance of the great pyramid, and in tracing several long galleries which terminate in spacious chambers.

The second pyramid, which is 655 feet square at the base and 398 feet high, defied, till lately, all attempts to penetrate into its interior. In the year 1818, however, Mr. Belzoni succeeded in

discovering the true opening, and proceeding along a narrow passage, upwards of 100 feet in length, he reached the great chamber, 46 feet long, 16 wide, and 23 high. The most conspicuous object was a large sarcophagus of granite, containing a small quantity of what appeared to be human bones. This seemed to confirm the opinion that these stupendous monuments were intended as sepulchres for the kings of Egypt; but a thigh bone which was sent to England, being examined by the royal college of physicians, was pronounced to belong to a cow, whence it has been inferred that these extraordinary structures were reared in honor of that favorite object of Egyptian worship.

About 300 paces to the east of the second pyramid appears the celebrated Sphynx, or statue of a huge monster, cut in the solid rock. Formerly nothing but the head, neck and top of the back were visible, the rest being sunk in the sand. Mr. Belzoni, however, has lately cleared away the sand from this huge mass, and discovered a temple of considerable dimensions between the legs of the Sphynx, and another in one of its paws. The length of the statue from the fore part of the neck to the tail is 125 feet.

Population.] The population is estimated at 2,500,000. It is composed of several distinct races. 1. The Copts, or descendants of the most ancient inhabitants of Egypt. They prove their origin by their striking resemblance to the paintings and sculptures of their ancient temples, and even to the mummies which are still preserved. They reside almost exclusively in Upper Egypt, and are supposed to be about 200,000 in number. 2. The Arabs or descendants of the Saracen conquerors. They are the most numerous class of the population, and are divided into Bedouins, or wandering Arabs, and Fellahs, or those employed in cultivation. The former occupy those vast deserts which everywhere surround the cultivated land of Egypt, and retain the same rude and predatory character which distinguish the Arabian in his native wastes. The Fellahs, on the contrary, fixed to one place, and exposed to insult and oppression from the ruling powers, have lost that independent and adventurous spirit which distinguished the original race. 3. The Turks, who have long been established in the great cities, and whose numbers and power have of late considerably increased. 4. The Jews, who are also numerous in the commercial cities, and are oppressed and persecuted.

Mamelukes.] The Mamelukes consisted of Georgian and Circassian slaves, who were brought into the country by the caliphs in the 13th century, and being intrusted with arms, were made a part of the military power of the state. They were thus enabled to rise against their masters, to massacre or expel them, and to assume the dominion of Egypt. By an unheard of caprice, they transmitted their power, not to their children whom they despised and neglected, but to new bands of slaves brought like themselves from the Caucasian countries. In the beginning of the 16th century they were conquered by the Turks, but the chief power was still left in their hands, although they nominally acknowledged the authority of the pacha or governor appointed

by the Grand Seignor. In 1798, however, when the French invaded Egypt, the strength of the Mamelukes was broken by successive defeats, and considerable bodies of Turks having marched into the kingdom, the pacha conceived a plan for their destruction; and having invited their chiefs to a feast, treacherously massacred the greater part of them. Those who escaped fled at first to Upper Egypt and afterwards to Nubia, where they are now established, and still cherish the hope of regaining their ancient power, though the vigor of the pacha's government seems to preclude any immediate prospect of it.

Government.] The government is despotic as in all the countries subject to Turkey. The present pacha, whose allegiance to the Grand Seignor is merely nominal, is represented as a man of very superior talents, and ambitious of improving the situation of his subjects and extending the trade of Egypt. He guarantees the security of person and property to all foreign merchants who establish themselves in the cities or traverse his dominions; and furnishes guards for the protection of merchandize ascending or descending the Nile.

Religion and Language.] The Arabs and Turks are Mahometans. The Copts profess Christianity and were formerly united with the Greek church. Their patriarch resides at Alexandria, and claims the supremacy, not only over the churches of Egypt, but over those of Abyssinia. The Arabic language is generally spoken. The Coptic language is that of the ancient Egyptians with a mixture of Greek and Arabic. A version of the Scriptures and some religious works are written in it; but it is no longer spoken.

Commerce.] No country in the world is so well situated for commerce as Egypt, lying as it does between three continents, and bordering on seas which connect it immediately with all the most populous countries on the globe. For more than 2,000 years the commerce of Europe with India passed through Egypt, and the present pacha is desirous of restoring it to its old channel. He insures goods for a small premium from the Red sea to the Mediterranean, and a number of vessels now annually arrive at Suez, laden with the products of China, Hindoostan and the Asiatic islands. This country is also the centre of an extensive commerce carried on by caravans with the interior of Africa, with Syria and Arabia. Through it pass the numerous pilgrims who come from all the Mahometan states of Africa to pay their devotions at the shrine of Mecca; and who defray the expenses of their journey by the trade which they carry on. The trade with Turkey is carried on principally from Damietta, and that with the other European states from Alexandria.

BARBARY STATES.

Situation.] The Barbary states occupy that long, narrow country, lying along the Mediterranean sea on the north, and the Sahara or Great Desert on the south, and extending from Egypt on the east to the Atlantic on the west.

Divisions.] The Barbary states are five in number, viz. 1. Barca. 2. Tripoli. 3. Tunis. 4. Algiers. 5. Morecco.

Face of the Country.] The most prominent natural feature of this region is the great mountain chain of Atlas which runs completely through it from west to east. The tract between this chain and the sea is from 50 to 200 miles wide, and is mostly level, well watered and fertile. The country between the mountains and the desert, particularly the part south of Algiers and Tunis, is dry and sandy, but produces dates in such abundance that it is called Biledulgerid or the country of dates. There is no large river in Barbary, but the soil is well watered by innumerable small streams, which rise in the mountains and after a short course discharge themselves into the sea. The country south of the mountains is also watered by some considerable streams which flow southward and are lost in the sands of the desert.

Climate.] The climate is temperate and pleasant. The winter is characterised by heavy showers, but from April to October rain seldom falls. The plague occasionally visits this country, and is awfully destructive in its ravages. The leprosy is also very common. There are no volcanoes; but various circumstances indicate the action of subterraneous heat, particularly the springs and rivulets, many of which serve the purpose of warm baths. Earthquakes are common, but they are never very violent.

Productions.] The vegetable productions do not differ materially from those of the south of Europe. Fruits are abundant and of excellent quality; the principal grains are wheat and barley. The mountains yield silver, copper, iron, lead and antimony. But the most abundant mineral is salt, which exists in immense quantities. All the lakes are nearly as salt as the sea; salt springs are more numerous than fresh; and in the territory of Tunis there is no water fit for drinking except what falls in the form of rain. Hence the immense labor bestowed in supplying the cities with water by aqueducts, conducted often over a vast extent of country.

Animals.] The mountains and desert tracts of Barbary nourish multitudes of the fiercer tribes of animals. The lion appears nowhere armed with greater strength and ferocity; and his attacks are frequent and formidable. Serpents of an enormous size are also common. The *buska* is a black, venomous serpent, 7 or 8 feet long, which coils itself up and darts to a very great distance; the wound inflicted is small, but in a few minutes after the bite, the sufferer turns black and expires. The borders of the Sahara

produce also the boa constrictor, the most enormous of the serpent species, and at the sight of which, according to ancient report, whole armies have fled. It is often 80 feet long, and as thick as a man's body, but is not venomous. It has immense strength, however, and moves with such swiftness that it is impossible to escape from it. It will twist itself round an ox or a tiger, and after crushing their bones to a jelly, will swallow them whole, and then lie supinely on the ground, for two or three days, unable to move. In this torpid state it may be killed or taken alive without danger. Scorpions are a constant source of annoyance in this country, and in summer frequently enter the houses and even the beds, but, in general, their bite is not mortal.

The locust is a plague of a very destructive nature. It is bred in the desert tracts, whence, at periods which cannot be foreseen, its swarms pour down in vast bodies upon the fertile regions. They move in a close and regular mass which bids defiance to all attempts to arrest or retard their progress. Every green substance is soon entirely consumed, and tracts covered with all the bloom of vegetation are at once converted into a desert.

Inhabitants.] The inhabitants may be divided into 4 classes: 1. The *Moors*, who are the ruling people, and constitute the mass of the population in all the cities. The term, Moor, is very vaguely applied, but is generally understood to mean that portion of the Mahometan conquerors of northern Africa, who have adopted a settled mode of life. 2. The *Jews*, who are the principal merchants, and are continually insulted, and most cruelly oppressed by the Moors. 3. The *Arabs*, who wander with their flocks and herds in the interior districts, on the borders of the great desert. They are governed by their own chiefs or sheichs, and merely owe tribute and military service to the sovereign in whose territory they are situated; and whenever the government is weak or disputed, the sheichs refuse to submit to it. 4. The *Brebers*, who are descendants of the ancient natives, and inhabit the mountainous regions. They live in fixed villages and cultivate the ground, but like the Arabs are governed by their own chiefs, and pay very little respect to the regular government. All these classes, except the Jews, are Mahometans.

Piracy.] The Moors are pirates, and formerly committed great depredations on the commerce of Christian nations in the Mediterranean. They carried on the business systematically, and their prisoners were condemned to the most galling slavery. Within a few years, however, the spirited exertions of the Americans and the English have given them a check, and it may be hoped, put a final period to their depredations.

1. BARÇA.

Barça lies along the coast of the Mediterranean between Egypt and Tripoli, and extends so far into the interior as to include the small states of Siwah and Augila. It is a sandy desert,

except a few oases or fertile spots inhabited by wandering Arabs, the whole number of whom is estimated at 300,000. They are divided into four or five tribes, under their own chiefs, who are in a great measure independent, but acknowledge a species of subjection to the bashaw of Tripoli. Derne, the chief town, lying on the coast in lon. $22^{\circ} 10' E$. was taken by the American general Eaton in 1805.

2. TRIPOLI.

Situation and Extent.] Tripoli extends on the coast of the Mediterranean from the gulf of Syrtis or Sidra to the gulf of Gabes. It is bounded on the N. by the Mediterranean; E. by Barca; S. by the Sahara; and W. by Tunis. Including Barca, the area is estimated at 210,000 square miles.

Government.] The government is despotic, and the sovereign is called pacha or bashaw. The country was formerly dependent on Turkey, and the pachas were appointed every three years by the Grand Signor, but a revolution took place about a century ago, which ended in establishing the ancestors of the present monarch upon the throne, and the office is now considered hereditary in his family. All his sons take the title of bey.

Population, Army, &c.] The population is estimated by Ali Bey at 2,000,000. The only troops maintained in time of peace are the body guard of the pacha, consisting of 300 Turks and 100 Mamelukes, but in time of war it is said that the Arab tribes can furnish an army of 10,000 cavalry and 40,000 infantry. The navy consists of 11 vessels, mounting in all about 100 guns. The revenue of the pacha is only about \$200,000 per annum.

Chief Town.] Tripoli, the capital, is situated on the coast in lon. $13^{\circ} 21' E$. It is surrounded by a wall, and has a convenient harbor defended by a fort. The population is estimated at only 12,000 or 15,000.

Commerce.] Considerable commerce is carried on with the European countries on the Mediterranean. The principal exports are olive oil, saffron, wax, honey, wool, salt and dates, all of which are productions of the country; together with guns, ostrich feathers and several other articles brought by the caravans from the interior of Africa. The great caravans from western Barbary pass through Tripoli on their way to Mecca.

3. TUNIS.

Situation.] Tunis is bounded N. and E. by the Mediterranean; S. E. by Tripoli; S. by Biledulgerid, and W. by Algiers.

Government, Population, &c.] At the head of the government is a Bey, who is under the protection of the Grand Signor, but is entirely independent, and his power is hereditary. The population is variously estimated from 2,000,000 to 3,000,000. In time

of peace, the army consists of 10,000 or 15,000 troops, but on an emergency can be increased to 50,000 or 60,000. The navy is composed of 15 or 20 small vessels. Tunis is reckoned among the piratical states, but the inhabitants are more civilized, and less disposed to robbery and violence than their neighbors. The revenue of the bey is estimated at 600,000 dollars.

Chief Towns.] Tunis, the capital, is situated on the west bank of a salt-water lake, about 6 miles from the head of the gulf of Tunis, with which the lake is connected by a narrow outlet. The town is surrounded by walls and contains about 120,000 inhabitants, many of whom are engaged in the manufacture of velvet, tapestry, turbans, and particularly the red caps for which Tunis is famous. An extensive commerce is carried on partly with European states, and partly by means of caravans with the interior of Africa.

Ruins of Carthage.] The remains of this great city, the ancient emporium of northern Africa and empress of the sea, are situated on a promontory 12 miles E. N. E. of Tunis, but can now scarcely be distinguished by a superficial observer. The harbor has been filled by the action of the winds and a change in the bed of the river which fell into it. There are no remains of the ancient walls, no triumphal arches or splendid pillars. The cisterns, however, still remain almost entire, and are on a magnificent scale. The great aqueduct which brought the water from a distance of 50 miles, may still be traced through the whole of its course, and the arches in many places remain almost entire.

4. ALGIERS.

Situation and Extent.] Algiers is bounded N. by the Mediterranean; E. by Tunis; S. by the Atlas mountains, which separate it from Biledulgerid, and W. by Morocco. It extends from about $3^{\circ} 30' \text{ E.}$ to $1^{\circ} 30' \text{ W. lon.}$

Divisions.] Algiers is divided into three provinces. 1. Mascara, which borders on Morocco, and contains the towns of Tlemsan and Oran. 2. Titterie, or Algiers proper, which forms the central province and contains the capital and Boujeiah. 3. Constantina or the eastern province, a very fertile region, which formerly belonged to Tunis, but has been wrested from that state by the Algerines. Its principal towns are Constantina and Bona.

Chief Towns.] *Algiers*, the capital, is situated on the coast of the Mediterranean in lon $3^{\circ} 30' \text{ E.}$ It is built on the declivity of a hill, and the houses, rising successively one above another in the form of an amphitheatre, and being all painted white, present a fine appearance from the sea. The harbor, which is about 800 feet long, 500 broad and 15 deep, is formed by two moles, one running directly north and the other northeast, and is strongly defended with forts and batteries. The city was bombarded by an American fleet under Commodore Decatur in 1816; and

afterwards, the same year, by a British fleet under Lord Exmouth. The population is variously estimated from 100,000 to 200,000.

Constantina is on a rocky peninsula formed by the small river Rummel, 160 miles E. of Algiers. It occupies the site of the ancient Cirta, celebrated as the bulwark of Numidia, and is still a strong town both by nature and art. The population, according to Hassel, is 100,000.

Oran is a strong town 170 miles S. W. of Algiers. It was in possession of the Spaniards between 1509 and 1708. The population is about 20,000. In 1790 the city was almost destroyed by an earthquake, in which many of the inhabitants perished.

Bona is a sea-port in lon. $7^{\circ} 45'$ E. 66 miles N. N. E. of Constantina. It has a good harbor and carries on considerable trade. The population is about 8,000. *Boujeiah* is a considerable sea-port 80 miles E. of Algiers.

Population and Government.] The population, according to Hassel, is 1,800,000. The government is a tumultuous and ill-regulated despotism. The dey is elected by the soldiery, or rather, when a vacancy occurs, the boldest and most popular seizes the sovereignty, which he is either allowed to retain, or is strangled to make way for a more fortunate rival. The soldiers are generally Turks and are about 12,000 in number.

Navy.] Two centuries ago the fleet of the Algerines equalled that of the first maritime states in Europe, and the ferocious and lawless manner in which this great power was exercised, rendered them truly an object of terror. They attacked the vessels of all Christian nations indiscriminately, and condemned their prisoners to the most galling slavery. For some time past, however, their navy has been declining, and a few years since contained only 3 frigates of from 36 to 50 guns each, and 10 or 12 smaller vessels. In 1816 it was almost annihilated by the English and Americans, and the dey was at the same time compelled to liberate all his prisoners, and to agree to the perpetual abolition of Christian slavery in his dominions.

Commerce.] The maritime commerce, till within the last 30 years, was chiefly in the hands of a French company, established at Marseilles. They had formed establishments at Bona, and several other places on the coast of the province of Constantina, particularly with a view to the extensive coral fishery, carried on near that shore, and which is capable of employing annually above 100 boats. They exported besides, wool, bees-wax, ship timber, ostrich's feathers, corn and hides, to the amount of nearly \$200,000 annually. During the long war between England and France the French lost this branch of their commerce, and in 1806 the British government stipulated with the dey of Algiers for the possession of the ports which the French formerly occupied, agreeing to pay for the privilege \$50,000 annually.

Biledulgerid.] This name is given to an extensive region situated immediately south of Algiers and Tunis, from which it is separated by the Atlas mountains. It forms the transition from the fertile plains of Barbary to that desert of sand which covers so

large a portion of Central Africa. The only product is dates. The inhabitants are wandering Arabs, who are under a nominal subjection to the states of Algiers and Tunis.

5. MOROCCO.

Situation and Extent.] Morocco is bounded N. by the straits of Gibraltar and the Mediterranean; E. by Algiers; S. by the Sahara and W. by the Mediterranean. It extends from 29° to 36° N. lat. and contains, according to Hassel, upwards of 300,000 square miles.

Divisions.] The empire of Morocco comprehends the former kingdoms of Fez, Morocco, and Tafilet. Fez and Morocco border on the coast and are fertile and populous; Tafilet lies on the east side of the Mount Atlas chain, and its soil, though at first fertile in dates and wool, passes gradually into the Sahara.

Chief Towns.] *Morocco*, the residence of the sovereign, is situated in a pleasant plain, at the foot of the Atlas mountains, in lat. $31^{\circ} 37'$ N. 120 miles from the sea. It is surrounded by a wall, 7 miles in circumference, and is said to have contained formerly 700,000 inhabitants, but the population has been reduced by wars and the plague, and is now estimated at only 30,000. The city still retains numerous temples, splendid mosques, and other vestiges of its ancient grandeur.

Fez, the capital of the former kingdom of Fez, and the most splendid and populous city in the empire, is about 200 miles N. E. of Morocco, in lat. $34^{\circ} 6'$ N. It lies in a valley, which is surrounded on all sides, except the north and north-east, with lofty hills, the higher parts of which are covered with orange groves and orchards, forming a delightful amphitheatre. A river winds through the valley, refreshing the fields, turning various machinery, and supplying the city with water. The city formerly contained 700 temples and mosques, and was held in such veneration by the Mahometans that when the road to Mecca was shut up, pilgrimages were made to Fez, as a city almost equally sacred. It was no less famous for its literary institutions, at a time when knowledge was almost exclusively in the possession of the Saracens. Its numerous schools for philosophy, physic and astronomy were resorted to by Mahometans from all the neighboring countries. There are still some remains of these institutions, but the studies are confined to the Koran, the first principles of grammar, and the antiquated logic and astronomy. The population is estimated at 100,000.

Mogodor, the principal sea-port, and the centre of almost all the commerce with Europe, is 120 miles west of Morocco. It is built on a low, sandy soil, and is surrounded on all sides, for several miles, by a desert of flying sand. The population is about 10,000.

Tangier is a sea-port on the straits of Gibraltar. The situation is favorable for pirates, who may here easily surprise merchant ships that are incapable of defence. The number of inhabitants is 10,000. They supply Gibraltar with provisions.

Salles is a famous sea-port, on the Atlantic coast, almost due west of Fez. It was formerly the strong hold of the Moorish pirates, and immense depredations were committed from it upon European commerce. Here are still to be seen the traces of an immense and dreary dungeon, formed under ground, for the reception of the unfortunate captives. The importance of the place is now much diminished, the harbor being injured by the accumulation of sand.

Government.] The government is the most absolute despotism on the face of the earth. There is no check whatever upon the will of the sovereign. Life and property are disposed of according to the caprice of the moment. Some of the monarchs have even considered an adherence to their engagements as an unlawful check upon their power. "Takest thou me for an infidel," said one of them to a foreigner, "that I must be the slave of my word."

Population, Army, &c.] The population, according to Jackson, who refers to the imperial registers as his authority, is 14,886,000. Others reckon it at only 5,000,000. The standing army consists of 36,000 men, a large proportion of whom are negro mercenaries, the emperor having found them more faithful than the Moors. The navy consists of 19 sloops of war, of from 16 to 30 guns each, besides 14 smaller vessels.

Manufactures.] The most celebrated manufacture is morocco leather. Silks, cottons and carpets are also made to some extent. The exports consist of corn, wool, goat skins, oil, wax, ivory, gums, almonds, &c. The value of these articles annually exported from Mogodor is estimated at more than 500,000 dollars. Caravans proceed regularly from Morocco to Mecca and to various parts of the interior of Africa.

WEST AFRICA.

Situation.] West Africa includes all the countries lying on the coast of the Atlantic between the tropics. The northern part of this tract is occupied by the Sahara or Great desert, which extends to the coast for some distance south of Morocco. The southern part also, including all below lat. $16^{\circ} 5'$ S. is uninhabitable for want of fresh water.

Rivers.] The principal rivers north of the equator are, 1. The *Senegal*, which rises in the mountains of Kong near lat. $11^{\circ} 50'$ N. and lon. 7° W. and flowing in a N. W. direction for about

1,000 miles, discharges itself into the Atlantic through many mouths near lat. 16° N. 2. The *Gambia*, which rises also in the mountains of Kong and discharges itself into the Atlantic under lat. $13^{\circ} 30'$ N. after a westerly course of 600 miles, for 400 of which it is navigable for sloops. 3. The *Rio Grande*, which falls into the Atlantic about 200 miles south of the *Gambia*, after a course of 500 miles. 4. The river *Sierra Leone*, which falls into the Atlantic in $3^{\circ} 20'$ N. lat. 5. The *Mesurado*, which rises in the mountains of Kong, and running in a S. W. direction, discharges itself into the ocean under lat. $6^{\circ} 25'$ N.

The principal rivers south of the equator are, 1. The *Congo* or *Zaire*, which falls into the ocean under the parallel of 6° S. lat. Its sources are unknown. It has been supposed by some that it was a continuation of the Niger, and under this impression an expedition was sent from England in 1816, under Capt. Tuckey, to explore the river. He ascended in a sloop 120 miles, and on foot 150 miles further, but meeting with insuperable difficulties was then obliged to return. 2. The *Coanza*, a considerable river, which falls into the Atlantic under lat. $9^{\circ} 30'$ S. Its sources are unknown.

Climate, Soil and Productions.] West Africa lies wholly within the torrid zone; and the climate, especially during the rainy season, is in many parts dreadfully fatal to Europeans. The soil is generally fertile and yields all kinds of tropical produce in abundance.

Slave Trade.] The coast of Africa has for three centuries been the seat of an extensive slave trade. The ships of European merchants, during that period, have carried off annually thousands of negroes, and sold them to American planters. This abominable traffic has been recently either abolished or greatly restricted by every civilized nation. The British have declared it felony, and the Americans, piracy; and both these nations employ ships of war to cruise along the coast and enforce the observation of their laws. The French, Spaniards, and Portuguese have also agreed by treaty to abolish the traffic, but such are the impediments thrown in the way, partly by the want of good faith in the governments of these nations, and partly by the address and determined wickedness of the slave traders, that all the efforts of the British and Americans have hitherto been unavailing, and the slave trade is now carried on to as great an extent as ever. The number of slaves taken from the coast of Africa in the year 1818 is estimated on good authority at 60,000.

Divisions.] The country is divided into numerous petty kingdoms, which are commonly classed in the following manner. 1. *Senegambia*, which extends from the Sahara or northern limit of West Africa to the parallel of 10° N. lat. including within these boundaries the country watered by the Senegal and *Gambia*, from which rivers it derives its name. 2. The coast of *Sierra Leone*, which extends from the borders of *Senegambia* to the river *Mesurado*, and is intersected nearly in the middle by the river *Sierra Leone*. 3. The coast of *Guinea*, extending from *Mesurado* river

to cape St. Catherine in lat. $2^{\circ} 20' S.$ 4. The coast of Congo, sometimes called *Lower Guinea* and sometimes the coast of Angola, which takes in all the rest of the country as far as cape Negro in lat. $16^{\circ} 5' S.$ where the uninhabited shore commences.

I. SENEGAMBIA.

Productions.] There are many fertile and well watered tracts in this country which would yield the sugar cane, cotton, maize, rice, tobacco, and all the tropical fruits in abundance. On the banks of the Senegal grows the Baobab, which frequently attains the circumference of 60 and 70 feet and is the largest tree of the forest. But the principal articles which attract Europeans to this coast are its gum, gold, ivory, and slaves.

Inhabitants.] The inhabitants consist principally of 4 races of negroes. 1. The *Mandingoes*, whose original abode was in Central Africa near the sources of the Niger, but they have now spread themselves through all the countries on the banks of the Niger, the Senegal, and, above all, of the Gambia, and have become the most numerous of all the races in West Africa. They are a very gentle race, cheerful in their dispositions, inquisitive, credulous, simple and fond of flattery. Their language is more refined than that of their neighbors, and is the language of commerce through a great extent of country. All the adjoining districts, indeed, are traversed by troops of Mandingo merchants, resembling in their habits and manners the Arabian caravan traders. 2. The *Foulahs* are also very widely diffused. Their original seat was near the sources of the Senegal, but they now possess populous and powerful kingdoms on the Niger, the Gambia, and the lower part of the Senegal, besides detached districts in many other places. They are Mahometans, but do not observe the rules of that religion with strictness, and are perfectly tolerant towards those of other sects. Their chief employment is pasturage. They are industrious, hospitable, and humane, and particularly celebrated for the mildness and politeness of their behaviour; so that in many places it is considered infamous to injure a Foulah. 3. The *Feloots* inhabit an extensive country, situated on the southern side of the Gambia. They are a wild, unsociable race, and have little direct intercourse with Europeans, the trade with them being generally carried on by Mandingo factors. 4. The *Jaloffs* occupy most of the country between the lower part of the Gambia and that of the Senegal. They profess the Mahometan religion, but combine with it many of their ancient superstitions. They are the handsomest negroes in this part of Africa, and are considerably cultivated. They excel the Mandingoes in the manufacture of cotton cloth.

European Settlements.] *St. Louis*, the capital of all the French settlements in Africa, is on a barren, sandy island in the Senegal, about 10 miles from its mouth. The population is estimated at

3,300, consisting of whites, negroes and mulattoes. The principal article of the trade of this settlement is the gum, known in commerce by the name of gum Senegal, which is much superior even to that of Arabia, and in some of the arts no other gum can be used as a substitute. The forests of acacia, from which this substance exudes, grow in a desert tract lying north of the Senegal, and forming part of the Sahara. There are three great forests, in the possession of three tribes of Moors, who collect about 500,000 pounds of gum annually, and bring it for sale to the banks of the Senegal, at the time and place appointed by the French.

Gallam is a French settlement on the upper part of the Senegal, established more than a century ago, with the intention of opening a communication from it with Tombuctoo, and the other countries on the Niger in Central Africa; but after many fruitless attempts this object has been abandoned. During the flourishing period of the slave trade Gallam was the rendezvous for all the slaves brought from the interior, but its commerce has now greatly declined.

Bathurst is a British settlement formed within a few years, on the island of St. Mary's, at the mouth of the Gambia. The object of the establishment is to introduce a regular trade into the Gambia, in the place of the slave trade; and thus far it has been remarkably prosperous. In 1819 the town contained more than 1,000 inhabitants, besides the garrison; and the duties on wax, ivory, gum, gold and hides exported to Great Britain, during the same year, amounted to more than £11,000 sterling. In point of commercial importance, this settlement bids fair to become the first British establishment in West Africa.

Goree is a small island, or rather rock, a mile from the south shore of the promontory which forms cape Verde. It is important principally as a military station, the French having made it the bulwark of their possessions in Africa. At the foot of the rock is the town of Goree, containing about 5,000 inhabitants.

II. COAST OF SIERRA LEONE.

This coast is distinguished principally for the colony planted there by the British in 1791, for the purpose of cultivating the productions suited to the climate, and opening a trade with the interior. The first settlers were about 500 in number, principally blacks, who were increased in 1793 by 1200 free negroes from Nova Scotia. They suffered severely from sickness, and in 1794, the settlement was destroyed by the French, but it was afterwards re-established, and in 1809 contained 1,500 persons, since which it has been very flourishing, and is now the most important English colony in Africa, except that at the cape of Good Hope. The population in 1820 was more than 12,000, and consisted principally of Africans rescued from the holds of slave ships, and who, when they were introduced into the colony, were at the lowest point of mental and moral depression. They now exhibit

a very gratifying proof of the susceptibility of the African character for improvement and civilization. From savages and gross idolaters, many of them have been converted into enterprising traders, skilful mechanics, and industrious farmers, supporting themselves and their families in comfort, and performing respectably all the duties of citizens. They present the singular spectacle of a community of black men living in freedom, enjoying the benefits of the British constitution, regularly attending public worship, and gradually improving, by means of schools and other institutions, in knowledge and civilization. This happy change has been effected by the blessing of God on the labors of English missionaries. The number of missionaries in the colony in 1819 was 17, and the number of the children in the schools at the various settlements was 2,104. *Freetown*, the capital, is on the south side of Sierra Leone river, near its mouth, and contained, in 1820, 4,785 inhabitants. The lands on the banks of the river for a considerable distance from its mouth are very fertile, producing cotton, rice, sugar, and most of the tropical fruits.

The American Colonization society have just commenced a settlement on this coast near cape Mesurado.

III. COAST OF GUINEA.

This coast is subdivided into the Grain coast, the Ivory coast, the Gold coast, the Slave coast, and the kingdoms of Benin and Biafra. Besides these, the kingdoms of Ashantee and Dahomey, situated in the interior, behind the Gold and Slave coasts, are usually included under the head of Guinea.

1. The *Grain coast*, called also the *Pepper coast*, extends from the river Mesurado to the village of Growa, 10 miles beyond cape Palmas. It yields a coarse species of pepper, but neither gold, ivory, slaves, nor any other valuable article of trade, and has, therefore, been little frequented by Europeans.

2. The *Ivory coast* extends from the village of Growa to cape Apollonia in lon. $3^{\circ} 10' W$. It abounds with ivory, but has never been much frequented, owing to the want of harbors. The shore is low, and runs in a direct line, without bays or inlets, and the surf is so violent, that only the natives can navigate through it. The usual method of carrying on trade is by boats, sent from the ships to meet the canoes at a certain distance from the shore. The inhabitants are said to be more savage than any others on the African coast.

3. The *Gold coast* extends from cape Apollonia to the Rio Volta, which discharges itself into the Atlantic under $0^{\circ} 47' W$. European settlements and trade have been carried here to a greater extent than in any other part of Africa. The principal articles of commerce are gold and ivory, which are brought in large quantities from the interior. The trade was formerly in the hands of the Portuguese, and afterwards of the Dutch, but Britain has now a more extensive footing on this coast than any

other nation. Cape Coast castle, the capital of all her settlements in Guinea, is in lon. $1^{\circ} 20' W$. and contains 8,000 inhabitants. She maintains forts also at all the other important points on the coast. Elmina, the capital of the Dutch settlements in West Africa, and the most respectable fortress on the Gold coast, is situated on a peninsula, at the mouth of a small river, in lon. $2^{\circ} 30' W$. It contains 15,000 inhabitants. The most numerous and powerful people on the Gold coast are the Fantees, but their power, since 1811, has been almost entirely broken by repeated and formidable invasions of the Ashantees from the interior.

4. The *Slave coast* extends from the Rio Volta to the bay and river of Lagos, which separate it from Benin. About 70 years ago, cultivation and the arts were carried to greater perfection on this coast than in any other part of Africa. The agricultural industry, the economy of land, and the density of the population were scarcely surpassed in the most flourishing parts of China. But this prosperity received a fatal blow, about the middle of the last century, by the invasion of the king of Dahomey, who defeated the kings of Widah and Ardra, the former sovereigns of the country, burnt the principal cities, and massacred a large portion of the population. The coast has ever since formed a part of the territory of Dahomey, and is governed by a viceroy; but under this ferocious and military tyranny it can never prosper. The only object for which Europeans visited this country was slaves, which were procured in great numbers, and the British formerly had extensive slave factories here, but since the abolition of the slave trade they have been withdrawn.

5. *Benin* extends from the Rio Lagos to the Rio Formosa, which falls into the Atlantic in $5^{\circ} 20' E$. The whole coast presents a succession of estuaries, some of them very broad, and the origin of which has never been explored. These streams, dividing into branches and intersecting the country, form a great number of alluvial islands, and this aspect of the coast has suggested to a recent geographer, that these islands might form the Delta of the Niger or great central river of Africa, the termination of which is involved in so much mystery. The king of Benin is an absolute monarch. The inhabitants are gentle in their manners, and in agricultural industry are superior to most of the African tribes.

6. *Biafra* lies to the south-east of Benin, and borders upon it, but is almost wholly unknown.

7. The names of *Calbongos*, *Gabon*, *Gobbi*, and *Camma* appear on the maps, along the coast between Biafra and cape St. Catherine, but they are not to be found in the works of some of the best geographers.

8. *Ashantee* is an extensive territory situated immediately behind the states which occupy the Gold coast. This kingdom, the name of which till very lately had scarcely reached Europeans, seems to be indisputably the most powerful, civilized and commercial of any in West Africa. They were first brought under the notice of the Europeans in 1806, by their invasion of the Fan-

tees and other tribes on the Gold coast. *Cummaraz*, the capital, was never visited by Europeans till the year 1817, when a mission was sent to it by the British from Cape Coast castle. The houses are small, but the palace is a magnificent structure, and the population is estimated at 40,000. As this city maintains a constant communication with Tombuctoo, Houssa, and other places on the Niger, it is supposed that it may become an advantageous channel for exploring the interior of Africa.

9. *Dahomey* is a considerable kingdom situated behind the countries on the Slave coast. It was scarcely known to Europeans till the middle of the last century, when the king extended his dominion to the sea, by the conquest of Widah and Ardra. The government is an absolute despotism of a singular character, being founded not on force or terror, but on a blind and idolatrous veneration for the person of the sovereign. The most extraordinary exercise of this despotism is in the treatment of the female sex, all of whom are considered as the property of the king, and entirely at his disposal. A distribution of wives takes place once a year at a grand festival, when each individual gives in such a sum as he is able to spare for the purchase, and receives in return such a wife as the king chuses to bestow. There is no room for discussion or complaint; be she old, ugly or deformed, she must be taken. The king himself has about 3,000 wives. They are trained to arms, and compose a regiment of guards for the defence of his person. War is the delight of the Dahomans, and the ferocity which prevails among them almost surpasses belief. Human skulls form the favorite ornament in the construction of the palaces and temples. The king's sleeping chamber has the floor paved with the skulls, and the roof ornamented with the jaw-bones of chiefs whom he has slain in battle. Every year a grand festival is held, which lasts for several weeks, and during which the king waters the graves of his ancestors with the blood of human victims.

IV. COAST OF CONGO.

The following are the countries on this coast, arranged in geographical order.

1. *Loango*, in its widest sense, extends from cape St. Catherine in lat. $2^{\circ} 20' S.$ to the river Zaire, a distance of more than 400 miles. The southern part, however, extending from $5^{\circ} 5' S.$ lat. to the river Zaire is also called *Cacongo*. The whole of this coast has been visited by the Portuguese and French almost exclusively for the purchase of slaves. The principal places are, 1. *Mayomba*, situated at the bottom of a bay of the same name, in lat. $3^{\circ} 45' S.$ The Mayomba negroes are of an inferior quality; their breast is narrow, their fibre soft, and their teeth bad. 2. *Loango* or *Booali*, the capital and residence of the king, is situated about 3 miles from the bay of the same name in lat. $4^{\circ} 40' S.$ It has 15,000 inhabitants and carries on considerable trade. 3. *Ma-*

lemba, 50 miles S. of Loango, has a fine harbor, and is much frequented by Europeans. The slaves brought to this port are of an excellent quality, strong, inured both to fatigue and subordination. They are called Congos, and are more highly valued in the West Indies than any other slaves. 4. *Cabenda* is delightfully situated in the neighborhood of Malemba. The port is free to all European nations.

2. Congo is bounded N. by the river Zaire or Congo, which separates it from Loango; E. by a rugged chain of mountains; S. by Angola, from which it is separated by the river Dande; and W. by the ocean. The Portuguese have several forts and factories for carrying on the slave trade. *St. Salvador*, the capital, is in the interior and has not been visited by the Europeans for many years.

3. ANGOLA lies immediately south of Congo, and extends on the coast from the mouth of the Dande to that of the Coanza. The Portuguese have settlements here, the capital of which, and of all the Portuguese settlements in this part of Africa, is Loando St. Paul. This city contains 13,000 inhabitants, and carries on an extensive commerce. The number of slaves exported is estimated at 16,000 annually.

4. BENGUELA lies immediately south of Angola, and extends on the coast from Coanza river to cape Negro in $16^{\circ} 5' S.$ lat. The climate is very unhealthy. The inhabitants are rude and barbarous, and have little connection with Europeans. The Portuguese have a few settlements here, the chief of which is called Benguela or St. Philipe de Benguela, situated on the bay of Vaccas or Cow's bay, in lat. $12^{\circ} 28' S.$

SOUTH AFRICA.

South Africa may be divided into 1. The colony of the Cape of Good Hope. 2. Caffraria.

I. COLONY OF THE CAPE OF GOOD HOPE.

Situation and Extent.] The colony of the cape of Good Hope, now belonging to the British, is bounded N. and E. by Caffraria; S. by the Indian ocean, and W. by the Atlantic ocean. It is nearly 600 miles long from east to west, and on an average about 200 broad. The area is estimated at 120,000 square miles.

Face of the Country.] The leading feature in the aspect of this territory consists of three successive ranges of mountains,

running completely across the country from east to west, almost parallel to each other, and to the southern coast. The first range is at the distance of from 20 to 60 miles from the coast. The second range, called the *Zwarte Berg*, or Black mountain, is considerably higher and more rugged than the first. The belt interposed between the *Zwarte Berg* and the first range is nearly of the same average breadth as that between the first range and the sea, but is of considerably greater elevation. Beyond the *Zwarte Berg*, at an interval of 80 or 100 miles, rises the *Nieuweldt* mountains, the highest range of southern Africa, and the summits of which are supposed to be 10,000 feet above the level of the sea. They form the northern boundary of the colony. The belt or plain interposed between these two last chains is considerably more elevated than either of the other two, so that this country forms as it were a succession of terraces, rising above each other.

The plain next to the sea is covered with a deep and fertile soil, watered by numerous rivulets, well clothed with grass, and with a beautiful variety of trees and shrubs. The second terrace contains a considerable proportion of well watered and fertile lands; but these are mixed with large tracts of the arid desert, called *Karoo*. The third belt, called the Great *Karoo*, is almost entirely a vast desert.

Capes and Bays.] *Cape Agullas*, in lat. $34^{\circ} 55'$ S. is the most southerly point of Africa. The *Cape of Good Hope* forms the point of a peninsula, which juts out at the S. W. extremity of the colony, and is connected with the main land by an isthmus, included between *Table bay* on the north and *False bay* on the south. *Saldanha bay*, lying north of *Table bay*, is the most secure and convenient harbor in Southern Africa. *St. Helena bay* is on the same coast 30 miles further north. *Algoa bay* is on the southern coast, and nearly at the eastern extremity of the colony.

Rivers.] There are 6 or 7 considerable rivers, which discharge themselves into the ocean after watering extensive tracts of country. Among them are the *Great Fish river*, which forms the eastern boundary of the colony, dividing it from *Caf-fraria*; and *Sunday river*, which falls into *Algoa bay*. *Orange river*, the largest river in Southern Africa, rises in the N. E. part of the colony, and after a westerly course of 600 miles, runs into the Atlantic under lat. $28^{\circ} 30'$ S. The principal part of its course is without the limits of the colony.

Chief Town.] *Cape town*, the only place in the colony deserving the name of a town, is agreeably situated at the head of *Table bay*, on a plain, sloping downwards from the *Table mountain*, which rises immediately back of the town to the height of 3,582 feet above the level of the sea. It is regularly laid out, and contains about 16,000 inhabitants, of whom 10,000 are negroes. *Table bay* affords poor accommodations for shipping, and during 4 months of the year, from May to September, when the winds blow from the north and north-west, vessels are obliged to seek shelter in *False bay* on the opposite side of the peninsula.

Productions.] The grounds in the vicinity of Cape town, for 20 or 30 miles in every direction, are employed almost entirely in raising wine and fruits; beyond this limit, for 50 or 60 miles, grain is raised in large quantities and of a very superior quality; the more remote parts of the colony are devoted to pastorage. Tobacco and many other plants thrive perfectly and might be cultivated to a great extent.

Population.] The population in 1810 was estimated at 81,000, of whom one third were whites and the rest negroes or Hottentots. The free inhabitants may be divided into 4 classes, viz. the inhabitants of the capital, wine growers, corn farmers, and graziers. The wine boors reside in the immediate vicinity of Cape town, and are the most civilized and comfortably situated of the peasantry. Most of them are descended from French families, by whom the vine was first introduced. The corn boors live generally at the distance of two or three days journey from the cape. Their agriculture is miserable, but the soil is fertile, and notwithstanding their slovenly management, they are generally in good circumstances. The grazier is much more uncultivated than the other classes. Many are perfect Nomades, wandering from place to place, and living in straw huts like the Hottentots.

Hottentots.] The Hottentots are the aborigines of this country. Their territory extends eastward along the sea-coast to the borders of Caffraria, and northward to the Orange river. They may be divided into 3 classes, viz. the inhabitants of the colony; the Bosjesmans, or wild Hottentots, who inhabit the mountainous districts, extending along the northern frontier of the colony; and the Namaquas, who occupy the north-western coast. All these classes were found by the Europeans in the lowest state of civilization. The inhabitants of the colony have been reduced to a state either of absolute slavery, or to a dependence not materially different. Their numbers, of late years, have rapidly diminished; and there are not now supposed to be, within the limits of the colony, more than 15,000. The *Bosjesman* Hottentots cherish a deadly hostility to the colonists, and from their rugged and inaccessible haunts frequently make inroads upon the plantations, carry off the cattle and sheep, and kill the farmers and their domestics. The Bosjesmans are among the ugliest of the human race, exhibiting in excess all the deformities observed in the Hottentots of the colony. They are extremely diminutive in size, the tallest of the men measuring only 4 feet 9 inches in height. Their activity, however, is incredibly great; and in running on rough ground, it is said, horsemen have no chance with them. In this respect they differ entirely from the Hottentots of the colony, who are naturally the most indolent people on earth. The *Namaqua* Hottentots differ very little in their persons from the other tribes, but use a language widely different.

Missionary stations.] The United Brethren established a mission among the Hottentots in 1736, which was renewed in 1792, and since that time the London Society have sent out many

missionaries. The labors of both have been attended with the happiest effects. The Hottentots, at the several settlements now cultivate the fields, own large numbers of cattle, exercise various trades, and contribute liberally to the support of religious and charitable institutions, exhibiting a wonderful proof of the power of Christianity to elevate men from the lowest point of intellectual and moral depression. *Gnadenhal*, the principal missionary settlement of the United Brethren in South Africa, is 120 miles from Capetown, in a direction nearly due east. *Bethelsdorp*, the principal establishment of the London Missionary society, is near the shore of Algoa bay, 500 miles east of Capetown.

Political importance.] This colony was originally planted by the Dutch, but in 1806 it fell into the hands of the British, and was confirmed to them, in 1815, by the Congress of Vienna. Its principal importance, in a commercial view, is derived from its convenience, as a place of refreshment to vessels sailing between Europe and the East Indies. It also consumes British manufactures to a large amount. The value of merchandize imported into the colony from Great Britain, in 1809, was £311,016. The principal exports are wine and brandy.

II. CAFFRARIA.

Situation.] Caffraria, Kaffraria, or the country of the Kaffer, is most properly the territory extending along the coast of South Africa, in a N. E. direction from the Great Fish river, which separates it from the colony of the cape of Good Hope, to Key's river, which divides it from the country of the Tambookies. The name, however, is sometimes applied to all that part of South Africa which is not included in the colony of the Cape of Good Hope, the tribes which inhabit this country, so far as Europeans are acquainted with them, being mostly of Kaffer origin.

Inhabitants.] The principal tribes known to Europeans in Caffraria, taken in its largest sense, are the Kaffers, Boshuanas, Damaras and Tambookies. 1. The *Kaffers*, or inhabitants of Caffraria proper, differ in every respect from the bordering race of Hottentots. There is not perhaps in the world a finer race of men as to external figure; they are tall, robust, muscular and handsome. Though black, or very nearly so, they have not a line of the African negro, either in their countenance or persons. They are more addicted to agriculture than the Hottentots, but pasturage is the favorite and general occupation. Their general habits are peaceable, but with the savage Bojesmans they are frequently at war. They have had occasional contests with the colonists, but the blame is said commonly to have been with the latter; and when victors, they have never been guilty of any cruelty. European mariners shipwrecked upon their coast have been treated with the greatest humanity.

2. The *Boshuanas* consist of numerous tribes, inhabiting the country north of the Cape colony and reaching for an indefinite extent into the interior of Africa. They are evidently of the same original stock with the *Kaffers*, but somewhat altered; inferior in bodily strength and stature, but superior in civilization and the arts of life. Their towns are of considerable magnitude. Latakoo contains 7 or 8,000 inhabitants. Nothing was known of the *Boshuanas* till 1801, when two English travellers penetrated into the country. Since that time Latakoo has been visited by Dr. Lichtenstein and Mr. Campbell. It is the capital of the Matchappin tribe, the only one among the *Boshuanas* yet visited by Europeans. Beyond them are numerous others which appear to be farther advanced in agriculture and the arts, and the race seems to improve as you progress northward.

3. The *Damaras* are a *Kaffer* race inhabiting the country between Orange river and the tropic. 4. The *Tambookies* live on the eastern coast, immediately north of the *Kaffers*. Very little is known about either of these tribes.

EAST AFRICA.

Situation and Divisions.] East Africa includes all the countries lying on the eastern coast of Africa between the tropics. It may be divided into 1. Nubia. 2. Sennaar. 3. Abyssinia. 4. The countries south of Abyssinia.

1. NUBIA.

Situation.] Nubia is bounded N. by Egypt; E. by the Red sea; S. by the kingdom of Sennaar, which is sometimes considered as a part of Nubia; and W. by unknown regions of Central Africa. It extends on both sides of the Nile from 17° to 24° N. lat.

Face of the Country.] With the exception of the immediate banks of the Nile, Nubia consists almost entirely of sandy and rocky deserts, extending on the east to the Red sea, and on the west to the Sahara. The eastern bank of the Nile is much better fitted for cultivation than the western, being more easily and abundantly watered. This is rather remarkable, since all the splendid ruins for which this region is distinguished are on the opposite bank. Hence we may suspect this last to have been formerly more fertile and populous, but reduced to its present state by the continual encroachments of those immense moving sands which extend to the westward. As the Nile here seldom or never overflows its banks, the territory is irrigated exclusively by the *sakies* or wheels constructed for the purpose of raising the waters of the river to the level of the adjacent grounds.

Climate.] The climate of the districts on the Nile, though in summer intensely hot, is said to be remarkably healthy; but the deserts are liable to the simoom or poisonous blast which often proves fatal to those who are overtaken by it. The only resource for the traveller, when he sees it coming, is to fall flat upon the ground, with his face to the earth, till the noxious wind has gone by. Another curious phenomenon is the lofty pillars of sand, which sometimes move across the desert with such rapidity that the swiftest horse would in vain attempt to escape them. When they pass between the traveller and the sun, they have the appearance of pillars of fire.

Chief Towns.] *Dongola*, the largest town, is on the Nile, in lat. $19^{\circ} 20'$ N. Since the expulsion of the Mamelukes from Egypt, they have taken possession of Dongola, and established here a petty state. Their number, however, does not exceed 500, with 3000 or 4000 negro slaves. *Suakem*, on an island in the Red sea near the coast, in lat. $18^{\circ} 20'$ N. is the rendezvous of the caravans which cross the desert on their way to Jidda in Arabia, and carries on considerable trade with Arabia, Egypt and the East Indies. It is under the government of an Arab sheich, who is nominally subject to the Grand Seigneur. *Ibrim*, is a small town on the Nile, 120 miles S. of Syene.

Inhabitants.] The population is composed of numerous tribes of independent Arabs, some carrying on trade in towns, others cultivating the ground, and a still greater number roaming over the extensive wastes which cover this part of Africa.

Government.] The country on the Nile is divided into a series of small independent states, each governed by its own chief. The governors of these little districts are described as very violent and arbitrary in their proceedings, and rude in their treatment of strangers; yet, under the protection of the pasha of Egypt, Europeans may now travel in perfect safety as far as Ibrim, all the principal forts between this place and the Egyptian frontier being in possession of the pasha's troops; but beyond Ibrim, they must incur the hazards usual in barbarous countries.

Antiquities.] One of the most remarkable features of this region consists in the splendid remains of antiquity with which it is covered. Some of these exceed in size the colossal monuments of Thebes. The most magnificent is the temple of Ipsambul, which was recently discovered by Mr. Burckhardt, and is situated immediately on the banks of the Nile between Ibrim and Syene. It is excavated from the solid rock, and when discovered was nearly two-thirds buried under the sand, which has probably covered it for more than 2,000 years. After great labor Mr. Belzoni succeeded in clearing away the sand, and arrived at the door way of the temple. On entering, he found the interior divided into numerous chambers, and spacious halls, supported by massy pillars, and adorned with colossal statues. The walls are covered with beautiful paintings representing battles, storming of castles, triumphs over the Ethiopians, sacrifices, &c. The

outside of the temple is 117 feet wide and 86 feet high. In front there are 4 enormous sitting colossi, the largest in Egypt or Nubia, except the great sphinx at the pyramids, to which they approach in the proportion of about two thirds. On the top of the temple there is a row of monkeys, 21 in number, in a sitting posture, and each 8 feet high and 6 across the shoulders.

Commerce.] The chief trade of Nubia consists in slaves imported from the interior of Africa, and either conveyed northwards into Egypt, or across the Red sea by Suakem to Arabia. The number annually imported is estimated at 5,000, of whom 2,500 are for Arabia and 1,500 for Egypt.

II. SENNAAR.

Situation.] Sennaar is bounded N. by Egypt; E. and S. by Abyssinia; and W. by Kordofan. It extends from 14° to 17° N. lat. A great part of Sennaar being nearly inclosed between the Nile and the Tacazze, formed what was called by the ancients the island of Meroe, the central seat of the empire of ancient Ethiopia, which repeatedly conquered Egypt.

Soil and Productions.] The country contains many desert tracts, over which the Arabs wander with their flocks; but there is also much fertile land on the banks of the Nile and the Tacazze, where rice, grain, melons, tobacco and the sugar cane grow luxuriantly.

Chief Towns.] Sennaar, the capital and residence of the king, is situated on the Bahr-el-Azrek, about two hundred miles above its junction with the Bahr-el-Abiad, or main branch of the Nile. It is a large city and is supposed to contain 100,000 inhabitants, but the houses are in general poorly built and only one story high.

Population.] The population is estimated at 2,000,000. It consists principally of three distinct classes. 1. The Shilluks, a race of negroes who originally inhabited the country on the upper part of the Bahr-el-Abiad, but in the beginning of the sixteenth century they conquered Sennaar, and their descendents have ever since been the ruling people. 2. The Nubians, or original inhabitants. They are negroes, and make the largest class of the population. They profess Christianity, but have connected with it many Pagan superstitions. 3. The Arabs, who inhabit the desert.

Government and Army.] The government is despotic, the power of the king being unlimited; but several of the provinces are governed by tributary chiefs, and the Arabs of the desert are virtually independent. The standing army, stationed in the vicinity of the capital, consists of about 16,000 men, of whom 1,800 are cavalry and equal to any in the world.

Commerce.] Considerable commerce is carried on at the city of Sennaar, the caravans passing through it on their way to Abyssinia, Arabia, Egypt and the interior of Africa. The commodities drawn from interior Africa, for export to Egypt and

Arabia, are gold dust, ivory, civet, but above all, slaves. The gold has the reputation of being the purest and best in Africa. The foreign commodity chiefly sought after is blue cotton cloth from Surat.

III. ABYSSINIA.

Situation and Extent.] Abyssinia is bounded N. W. and N. by Sennaar; E. by the Red sea; S. and S. W. by the country of the Galla. The limits are not accurately known, but the area is estimated by Hassel at about 500,000 square miles.

Face of the Country.] Abyssinia is entirely a mountainous country. A lofty range, called Lamalmon, bars the entrance from the Red sea. The mountains of Samen, which run along the western bank of the Tacazze, are still more elevated. The mountains of Gojam, which give rise to the Bahr-el-Azrek, or Abyssinian Nile, are not supposed by Mr. Bruce to exceed half a mile in height, and are cultivated to the summit. A lofty range is said to run along the whole southern frontier and is supposed to form a part of the Mountains of the Moon. The height of none of these mountains has ever been accurately ascertained, but some of the summits in the ridge of Samen are known to be covered with snow during the greater part of the year.

Rivers.] The two principal rivers are the Bahr-el-Azrek or Blue river, and the Tacazze. 1. The *Bahr-el-Azrek* rises near lat. 11° N. and lon. 37° E. and flows almost immediately into the lake of Dembea, through which it passes without mixing its waters, so that the current remains always visible. It issues from the lake at its southern extremity, and pursuing a semicircular course, turns gradually to the north, and flows in this direction through Sennaar, till in lat. 16° N. it unites with the Bahr-el-Abiad or principal branch of the Nile. In Abyssinia, and in Europe, till the middle of the last century, this river was always considered as the head of the Egyptian Nile, but the superior magnitude of the Bahr-el-Abiad seems now to be clearly proved. The principal tributaries of the Bahr-el-Azrek are the Dender and the Maleg. 2. The *Tacazze* rises near lat. 12° N. lon. 39° E. and running in a N. W. direction through Sennaar, joins the Nile in lat $17^{\circ} 45'$ N.

Divisions.] Three centuries ago the whole of Abyssinia was firmly and happily united under one sovereign, but internal dissensions and the inroads of the Galla, a barbarous people from the south, have gradually dismembered the finest provinces of this once flourishing empire. The country is now divided into three principal independent states: 1. The *kingdom of Tigre*, comprehending the provinces between the Red sea and the Tacazze, viz. Tigre proper, Agame, Enderta, Wójjerat, Wofila, Lasta, Avergale, Samen, Zemben, Sire and the kingdom of Baharnegash. 2. *Amhara*, comprehending the provinces west of the Tacazze, the principal of which are Amhara proper, Dembea, Damut, Gojam, and Begemder. 3. The *provinces of Shoa and*

Efat, lying south of the sources of the Tacazza. Besides these divisions, there are several ports on the Red sea, under the government of Arab princes, who acknowledge the sovereignty of the Grand Seignor; and several districts in the interior are occupied by independent tribes.

Climate.] The climate of Abyssinia is on the whole fine. The ranges of mountains, with which it is everywhere intersected, preserve the air cool, and afford a supply of water sufficient to maintain fertility. Most of the towns and villages are delightfully situated on the declivities of the mountains. The deep vallies, from the combined influence of heat and moisture, are somewhat unhealthy.

Soil and Productions.] In consequence of its physical structure, Abyssinia is exceedingly fertile, and is exempted in a great measure from the sand, which dooms so large a portion of Africa to sterility. Wheat is raised in considerable quantity in the high grounds, but the plant most commonly cultivated is teff, which grows on almost every soil, and affords the bread which is in universal use. Among the other vegetable products are the papyrus, so celebrated among the ancients as the original material of paper; balsam, myrrh and other odoriferous products, which are obtained along the coast of the Red sea.

Animals.] There is a great variety of wild animals. Among these are the hyænas, which appear to be the most fierce and untameable of all animals. In most parts of the country they are found in vast numbers, and travellers are in continual danger from them. They are not naturally gregarious, yet sometimes assemble in vast troops, attracted by the scent of dead bodies, which according to the barbarous custom of the country are often left unburied. The elephant and rhinoceros are numerous in the low grounds. Hippopotami and crocodiles abound in all the rivers. The domestic animals are generally the same with those of Europe. The most remarkable is the Galla ox, which has horns of an enormous magnitude. Mr. Salt saw one four feet long, and 21 inches in circumference at its root.

Chief Towns.] Gondar, the capital of the kingdom of Amhara, is situated about 30 miles N. E. of the lake of Dembea. It contains 50,000 inhabitants, and is now in the hands of the Galla, together with the whole province in which it is situated.

Axum, the ancient capital of Abyssinia, lies about 150 miles N. E. of Gondar. It is distinguished for its magnificent ruins. Of these the most remarkable is a large obelisk, which stands in the middle of the principal square. It is 80 feet high and is composed of a single block of granite, curiously carved. The order of architecture is strictly Grecian. Axum contains at present about 600 houses. *Adowa*, 12 miles E. of Axum, is the capital of Tigre. It contains 8,000 inhabitants, and is remarkable for the extensive manufacture of cotton cloths. It is also the channel by which the communication between the coast and the interior is almost exclusively carried on. The other considerable towns in Tigre are *Antalo* and *Dixan*.

Masuah, the principal sea-port of Abyssinia, is situated in lat. $15^{\circ} 34' N.$ on a small island in the Red sea, separated from the continent by a narrow channel. Its intercourse is chiefly with Mocha and Jidda, and the imports consist of cotton, spices, piece goods, lead, iron, copper, tin, and European manufactures. The exports are rhinoceros' horns, gold, ivory, honey, slaves and wax. The governor of the city acknowledges the sovereignty of the Grand Seignor. *Arkeeko* is a sea-port, at the bottom of the bay of Masuah, and not far from the town of the same name.

Salt plain.] In the eastern part of the kingdom of Tigre is a large plain, about 4 days journey across, and covered with salt. The salt is perfectly pure and hard for about two feet deep; but that lying beneath is coarser and softer till purified by exposure to the air. It is cut with an adze into pieces, which not only serve as seasoning to food, but even circulate as money in Abyssinia. The digging of the salt is attended with considerable danger, from the vicinity of the Galla, who frequently attack those employed, as well as the caravans which convey the salt to Antalo.

Population and Religion.] The population is not less than 4,000,000. It consists partly of Abyssinians, partly of Arabs, partly of the Galla, together with some other negro tribes. The Abyssinians were converted from Judaism to Christianity prior to the middle of the fourth century, but their religion still retains many Judaical observances. They abstain from the meats prohibited by the Mosaic law; they practise circumcision, and keep both Saturday and Sunday as sabbaths. The Coptic patriarch of Cairo is the nominal head of the church, and from him the Abuna or resident head receives his investiture. They have monasteries, both of monks and nuns. Their veneration for the Virgin is unbounded, their saints also are extremely numerous and surpass in miraculous power even those of the Romish calendar. This system of Christianity does not prohibit polygamy. The Galla were formerly idolaters, but a very large proportion of them have been recently converted to Mahometanism.

Political Condition.] The kingdom of Tigre, the most powerful of the three states into which the country is divided, is under an Abyssinian prince whose power is unlimited; Amhara, originally the centre of the Abyssinian power, is now under a chief of the Galla, who is said to be able to bring into the field an army of 20,000 cavalry; the southern provinces of Shoa and Efat are under an Abyssinian prince, who is entirely independent of the sovereign of Tigre. These different states are constantly at war with each other, while at the same time the governors of the smaller provinces are almost continually rebelling against their sovereigns. Abyssinia thus presents a scene of perpetual bloodshed, from hostilities carried on in the very bosom of the country, nor is a single district for a moment secure from devastation.

Manners and Customs.] The manners of the Abyssinians are characterized by a peculiar barbarism and brutality. They seem to have no more regard for the life of a man than for that of a

brute. They kill each other on very trifling occasions, and the dead bodies are left in the streets to be devoured by the dogs and hyænas. They eat the raw flesh of animals immediately after they are slain, while the blood is yet warm; and when on a journey, it is a frequent practice to cut steaks from living animals and then to drive them on, roaring under the pain of the wound.

The Galla.] The Galla are a savage people, who occupy large territories lying south of Abyssinia, and have overrun some of its finest provinces. Very little is known about them or the country from which they originated, but they appear to have been making continual progress for at least two centuries both towards the north and the south. They are of a brown complexion, hardy, and warlike, and particularly well fitted for irregular and desultory warfare. Nothing, it is said, can be more uncouth than the aspect of this people, at least of those tribes who have made no alteration in their original rudeness. They plait their hair with the entrails of oxen, and wear round their waists the same ornaments. They anoint their heads and bodies with melted grease, and, except a goat's skin round their shoulders, leave the rest of the body naked. The Galla are divided into various tribes, which are known by distinct names.

IV. COUNTRIES SOUTH OF ABYSSINIA.

ADEL. This country lies on the coast immediately to the south-east of Abyssinia. The inhabitants are Mahometans. They are not united under one government, but divided into a number of tribes which carry on almost perpetual war with Abyssinia.

BERBERA is the name of the district extending from Adel to cape Guardafui. It is more productive than any other part of the world in gums, myrrh and frankincense; and the fame of Arabia for these valuable aromatics is derived entirely from its being the channel by which the productions of this district are conveyed to foreign countries. Berbera, the principal town, is the seat of a great annual fair, which is resorted to by caravans from a great distance in the interior. This country is inhabited by various tribes of the Somaali, many of whom appear to be very civilized and commercial, and a recent traveller of intelligence has given it as his opinion that this would be one of the best routes for penetrating into the interior of Africa, particularly to the sources of the Bahr-el-Abiad.

THE COAST OF AJAN extends from cape Guardafui to the river Magadoxa, or from 3° to $11^{\circ} 50'$ N. lat. A great part of it is sandy, flat and barren. According to Mr. Salt, it is chiefly inhabited by different tribes of the Somaali.

THE COAST OF ZANGUEBAR extends from the river Magadoxa to cape Delgado, or from 3° N. to 10° S. lat. It is inhabited by negroes, and is divided into several kingdoms, deriving their names from their principal towns, which are as follows. 1. *Magadoxa*, situated on a bay at the mouth of the river of the same name, in lat. $2^{\circ} 8'$ N. It carries on considerable commerce, which is conducted by the Arabs. The interior of the kingdom is almost wholly unknown. The Portuguese were never able to obtain any footing here, owing to the determined opposition of the people; and all Europeans have uniformly experienced the most inhospitable treatment. 2. *Melinda*, the capital of the kingdom of the same name, is situated on a bay in lat. 3° S. It is the seat of a very considerable trade, being resorted to by vessels from the Red sea, Persia, and the northern parts of India. The exports consist of gold, ivory, copper, wax and drugs, in exchange for silks, cottons, linen cloths, and European commodities. The city was formerly tributary to the Portuguese, but was wrested from them, more than a century ago, by the Arabs, in whose power it has ever since remained, and it is now seldom visited by European vessels. The interior of the country has not been explored by Europeans. 3. *Mombaca*, the capital of the kingdom of Mombaca, is situated on an island in lat. $4^{\circ} 40'$ S. It was formerly occupied by the Portuguese, but they were expelled by the natives in 1631, and it is now rarely, if ever, visited by European ships. It is much frequented, however, by the Arabs, who carry on an extensive trade. 4. *Quiloa* is built on an island, situated close to the main land, at the mouth of the river Coavo, in lat. $8^{\circ} 41'$ S. The Portuguese found it, in the beginning of the sixteenth century, the largest town in Eastern Africa, and the centre of an extensive commerce. They established themselves here in 1529, but Mosambique being made the centre of their settlements, Quiloa was suffered to fall into decay, and at last was wrested from them by the Imam of Mascat in Arabia, in whose possession it still remains. It is now of little importance. The islands of Zanzibar or Zanguebar, Monfia and Pemba, which lie off the coast of the kingdom of Quiloa, are also dependent on the Imam of Mascat.

THE COAST OF MOZAMBIQUE extends from cape Delgado to the mouth of the river Zambese, or from 10° to 19° S. lat. The city of Mozambique, situated on a small island in lat. 15° S. is the capital of all the Portuguese possessions in East Africa. These possessions were at one time very extensive, embracing all the countries on the coast from the equator to the southern tropic, but those situated to the north of the parallel of 10° S. lat. have been successively wrested from them, and their dominion is now bounded by cape Delgado on the north and cape Corrientes on the south. The city of Mozambique retains few traces of its former importance. The trade, which consists chiefly in the export of gold, ivory and slaves, has much declined, and the population is estimated by Mr. Salt at only 2,800, of whom 500 are Portuguese.

300 Arabs, and 1500 negroes. *Quilimane*, a small town with a fort and Portuguese garrison, is situated on the river Zambese near its mouth. It is the depot of the merchandize carried up the river, and of the ivory and gold brought from the interior.

The country in the interior, behind the coast of Mozambique, is inhabited by the Makooa, a powerful race of negroes, who cherish the most inveterate enmity to the Portuguese, and often extend their ravages to the coast, immediately opposite the city of Mozambique. The islands of Querimba extend along the coast of Mozambique, to the south of cape Delgado, and the part of the coast lying opposite to them is sometimes called the coast of Querimba.

THE COAST OF SOFALA extends from the mouth of the Zambese to cape Corrientes, or from 19° to $23^{\circ} 48'$ S. lat. The principal rivers which intersect this territory, are, the *Zambese*, a large river which forms the northern boundary, and discharges itself into the Indian ocean through many mouths near lat. 19° S.; the *Sofala*, which falls into the sea in lat. $20^{\circ} 15'$ S.; the *Sabia*, which empties itself in $21^{\circ} 10'$ S. lat.; and the *Inhambane*, which runs into the ocean in $23^{\circ} 15'$ S. lat. The countries lying immediately on the Sabia and the Inhambane are sometimes called after the names of the rivers.

The principal settlements of the Portuguese in this country are, 1. *Sena*, situated on the river Zambese, about 250 miles from its mouth. It contains about 2,000 inhabitants; is protected by a strong fort; and forms the centre of the trade carried on with the interior, which consists chiefly in the export of ivory and gold dust. 2. *Sofala*, situated near the mouth of the river of the same name, was formerly a place of great commercial importance, being the depot of the gold and ivory brought down the great river Zambese, but since the establishment of Quilimane, at the mouth of that river, Sofala has sunk into comparative insignificance. The Portuguese also maintain forts for the protection of trade on the river Inhambane and at cape Corrientes.

Mocaranga and *Botong* are extensive countries in the interior behind the coast of Sofala. Very little, however, is known about them. Mocaranga is said to be divided into a great number of independent states. *Zimbao* is the capital.

CENTRAL AFRICA.

General Remark.] Very little is known respecting Central Africa. South of the mountains of the Moon every part of it is wholly unknown; and north of those mountains, there are very few districts which have ever been visited by Europeans.

Rivers.] The two principal rivers are the Niger and the Wad-el-Gazel. The *Niger* rises, as has already been mentioned, in the mountains of Kong, and flows east; how far it is not known. The *Wad-el-Gazel* rises in the eastern part of Central Africa, and flows north for a considerable distance, till it is lost in the sands of the desert.

The following are the principal countries, known to Europeans, in Central Africa.

BAMBOUR is a kingdom lying between the sources of the Senegal and Gambia. It abounds with gold, and appears to be the main source of the large quantity of that metal which is on one side conveyed down the Gambia and Senegal, and on the other across the desert to Barbary. The inhabitants are Mandingo negroes. **JALLONKADOO** is the name of a country lying around the sources of the Senegal. **KONG** is a kingdom south of the Niger near its source. **KAARTA** is a kingdom of considerable extent between the Niger and the Senegal. **Kemmoo** is the capital.

BAMBARRA is a populous and powerful kingdom, bounded west by Kaarta, and east by Tombuctoo. It is traversed through its whole extent from west to east by the Niger. This country was visited by Mr. Park, and he represents it as in general very fertile and highly cultivated. The inhabitants consist of a mixture of negroes and Moors. The negroes are the ruling people, and are of a very kind and gentle disposition: the Moors are more intelligent, active and commercial, but they are rough in their manners and intolerant. *Sego*, the capital, is situated on both sides of the Niger in lon. $2^{\circ} 30'$ W. and contains about 30,000 inhabitants. *Bammakoo* is 180 miles S. W. of Sego, on the Niger, at the point where the navigation is interrupted by cataracts. It carries on a great trade in salt.

TOMBUCTOO, one of the most powerful and civilized kingdoms in Central Africa, lies on both sides of the Niger, east of Bambarra. Caravans proceed annually from Tombuctoo to Morocco, Tunis, and the other principal cities in Northern Africa, carrying with them gold, slaves, ostrich feathers, goatskins, gums, ivory, &c. and bringing in return various European and African wares. This extensive commerce implies a numerous population and a considerable degree of refinement, and Europeans have been very anxious to obtain more information respecting this interesting but unknown country. No white man has ever yet been able to penetrate so far into the interior of Africa, if we except Adams, the American sailor, who according to his own account was carried captive, in 1811, to the city of Tombuctoo, the capital of the kingdom. His account, however, has been doubted, and all the other information we possess is derived from the reports of Moorish merchants. From them it appears that the inhabitants are partly negroes, and partly Moors, that the sove-

reign is a negro and is despotic, that the religion is Mahometanism, that schools are established, and that cotton and linen goods are extensively manufactured. The city of Tombuctoo is about 2 miles from the banks of the Niger, and 60 days journey from Morocco.

HOUSSA is an extensive country on the Niger, east of Tombuctoo. It has never been visited by Europeans, but is said by the merchants to be more civilized than Tombuctoo. The inhabitants consist of negroes and Moors, but the negroes are the ruling people and form much the largest portion of the population. They are the most intelligent people in the interior of Africa. They manufacture cotton cloths in great quantities, and their agricultural system is as perfect as that of the Europeans, though its processes are more laborious. The city of Houssa, situated two days journey north of the Niger, is said to be considerably larger than Tombuctoo.

BORNOU is an extensive country, lying on the Wad-el-Gazel, which traverses it from south to north and is lost in the desert of Bilma, which lies on the N. W. side of the kingdom and forms a part of the Sahara or great desert. The soil is fertile and produces Indian corn, rice, grapes, apricots, melons, lemons, and pomegranates in abundance. The limits of Bornou are very uncertain, but the emperor seems to be by much the most powerful sovereign in the interior of Africa; for, independent of his own very extensive dominions, all the countries to the south and west are his tributaries. *Bornou*, the capital, is situated about a days journey from the Wad-el-Gazel, and is said to be a very large city. *Dombou* is situated on the northern frontier, 200 miles N. N. W. of Bornou. Near it are the salt lakes whence not only this kingdom, but many of the states on the Niger are supplied with salt.

BEGHERME is a country very little known, lying south of Bornou and dependent upon it. BERGOO is an extensive territory having Begherme on the west, Darfur on the east, and on the north Bornou, to which it is tributary. Wara is the capital.

DARFUR is a considerable kingdom, filling up a large portion of the wide interval between Abyssinia and Bornou. On the N. W. it has Begherme and Bergoo, which separate it from Bornou, and on the E. Kordofan and the country of the Shilluks, which separate it from Sennaar and Abyssinia. The population is estimated by Mr. Browne at 200,000, and consists partly of settled inhabitants, living in towns and villages, and partly of wandering Arabs. *Cobbe*, the capital, contains 6,000 inhabitants, chiefly foreigners from Egypt, Sennaar and other eastern countries. The government, as is usual in Mahometan countries, is despotic. Darfur has an extensive commerce with Egypt, carried on by

caravans. There is also considerable intercourse with Mecca, which is carried on sometimes directly through Suakem and Jidda, but more frequently circuitously, by the way of Egypt.

KORDOFAN is situated to the west of the Bahr el Abiad, between Darfur and Sennaar. It is sometimes subject to Darfur and sometimes to Sennaar, but according to the latest information it was independent. The natives of Kordofan cherish an inveterate hatred against those of Darfur, and have entirely interrupted their direct communication with Sennaar. Ibeit is the capital.

WANGARA is a country lying south of Bornou, to which it is subject. Our knowledge of it is very imperfect. It is said to be traversed by the Niger, and according to Major Rennell's theory, that river loses itself in the lakes and marishes of this country.

KASHNA or CASSINA is an extensive kingdom situated to the W. of Bornou, and supposed to extend as far south as the Niger. Cassina, the capital, is a city of great extent, but very little is known respecting it. It is five days journey north of the Niger, and the caravans from the countries south of that river pass through it on their way to Egypt and Barbary. Like most other states in this part of Africa, Cassina is now tributary to Bornou.

ASSEN is a powerful kingdom lying north of Kashna and west of Bornou. The inhabitants belong to a tribe of the Tuarik, a powerful but barbarous race, who wander over all the adjoining part of the Sahara. Agades, the capital, is a place of extensive trade, and is on the route of the caravans which pass between Cassina and Eastern Barbary. The merchants of Agades are the sole carriers of the salt, which is found on the banks of the lake of Dombou, in the desert of Bilma, though that territory belongs to Bornou.

FEZZAN lies between Bornou and Tripoli, and forms, as it were, a great island in the midst of the Sahara. It consists of an extensive valley, bounded by an irregular circuit of mountains on all sides except the west, where it opens into the desert. The part capable of cultivation is about 300 miles long and 200 broad. The heat of summer is intense and sometimes scarcely supportable even by the natives, while the winter, on the other hand, is accompanied with cold and bleak winds, which are painful even to the natives of a northern climate. The population is estimated by Mr. Horneman at 70,000 or 75,000. The king, who is an hereditary monarch, pays a small annual tribute to the bashaw of Tripoli, but in other respects is entirely independent, and rules his dominions with absolute sway.

Fezzan derives its chief importance from that favorable situation, which renders it a grand depot for the immense interior

commerce carried on between Northern and Central Africa. The intercourse with Tombuctoo indeed has always been carried on chiefly from Morocco, while the caravans to Sennaar and Darfur go directly south from Egypt. But the communication of Egypt and of Barbary with the vast countries situated to the east and south of the Niger, centers almost entirely in Mourzouk, the capital of Fezzan. A caravan sets out annually from Cairo, and passing by Siwah, Augila and Zuila, reaches Mourzouk in about 40 days. The journey from Tripoli is usually performed in 27 days. Of the caravans to the south, the principal is that to Bornou, with which kingdom Fezzan maintains a regular and extensive intercourse. The road is attended with considerable difficulty as the travellers have first to cross the lofty and rugged mountains of Tibesty, and then the extensive desert of Bilma, which appears to equal in desolation any part of the Sahara. As they approach Dombou, however, life and fertility again make their appearance; and the rest of the journey is through the cultivated part of Bornou, and along the banks of its great river Wad-el-Gazel. At length, after a journey of fifty days, they reach the capital. Another grand caravan goes directly southward into Cassina. It proceeds by Ganat and Assouda to Agades. Some merchants stop at that great commercial city and proceed no farther; but the greater number go on to Cassina. The route from Mourzouk to Cassina occupies about 60 days. A few proceed still farther southwards, and directing their course westward, cross the mountains of Kong to Ashantee. The goods sent from Fezzan to the southward consist of fire arms, powder, sabres, knives, paper, tobacco, India goods, red worsted caps from Tunis, glass and toys of various kinds. The imports are, gold dust from the countries on the Niger, particularly Wangara; copper from Bornou; civet, tiger skins, dyed leather, and slaves in large numbers. The number of slaves brought to Mourzouk in 1819 was 5,000.

The British government have recently appointed a consul to reside at Mourzouk, and another at Bornou, and are determined to make vigorous efforts to penetrate by this route into the interior of Africa.

The parts of the Sahara both on the east and the west of Fezzan are inhabited by wandering tribes. The principal races are the Tuarik and the Tiboo. The *Tiboo* occupy the tracts to the east and south-east of Fezzan. They bear a strong resemblance to the negroes, but are not so black. The *Tuarik* possess all the northern part of the Sahara, extending from Fezzan and the country of the Tiboo on the east, to Morocco on the west. The inhabitants of the kingdom of Asben are of this race. Besides Fezzan there are several considerable oases or fertile spots interspersed in different parts of the Sahara; the principal of which is *Tuat* or *Twat*, extending from 1° to 6° E. lon. in about lat. 23° N.

AFRICAN ISLANDS.

SOCOTRA, situated about 120 miles east of cape Guardafui, is 80 miles long and 20 broad. It has a considerable population of Arab origin, and is subject to the Imam of Mascat in Arabia. The chief commodity for which the island is resorted to is aloes, which are of a superior quality to those produced in any other part of the world.

The **COMORRO ISLANDS**, four in number, lie about mid-way between the northern part of Madagascar, and the continent of Africa. The inhabitants are harmless and gentle, but they have been dreadfully harassed by a band of desperate pirates who occupy the northwestern part of Madagascar. *Joanna*, the largest of the group, is frequented by Europeans, particularly the English, for water and provisions.

MADAGASCAR, the largest of the African islands, is separated from the eastern coast of the continent by the channel of Mozambique. It extends from 12° to 25° S. lat. The length is about 900 miles, and the area is computed at 230,000 square miles. A chain of very lofty mountains runs through the whole length of the island from N. to S. The climate is genial and the soil is fertile, producing rice, which is the principal food of the inhabitants, the sugar-cane, the cocoa-nut, the banana, and all the common productions of tropical climates, besides several which are peculiar to the island. The population is estimated at 4,000,000, and on the coast is composed of various races, Malays, Arabs and Jews; but the interior is inhabited by a negro race. They are considerably advanced in civilization, practising agriculture and several of the useful arts, and carrying on commerce by barter. The island is divided into numerous petty states, and the form of government is usually aristocratical. The French formerly attempted to establish settlements in different parts of the island, but were repeatedly driven out in a disastrous manner owing to the hostility of the natives. Their most permanent establishment was at fort Dauphin on the S. E. side of the island.

BOURBON is an island belonging to France, situated about 400 miles to the east of Madagascar, and containing 2,500 square miles. It is composed of two mountains, one of which is a volcano, and is continually throwing out flame, smoke and ashes. Coffee has long been the principal cultivated production. The island yields also corn, rice, maize, tobacco, the sugar-cane, aloes, ebony and a variety of trees that afford odoriferous gums and resins. There are no good harbors, and violent hurricanes frequently damage the shipping, and destroy houses and crops. The population in 1811 was 80,346, of which number 16,400 were whites, and the rest free negroes and slaves.

MAURITIUS, or the **ISLE OF FRANCE**, is situated about 600 miles E. of Madagascar, and is estimated to contain 1,300 square miles. It was settled by the French in 1712. About the middle of the last century they strongly fortified it, and made it their principal naval station in the Indian seas. It preserved its importance even after Britain annihilated the French power on the continent of India, and became then a grand privateering station against the British shipping. It was estimated at Calcutta that, in ten years, prizes to the value of £2,500,000 had been taken and carried into Mauritius. In 1810 it was taken by the English and may now be considered as permanently belonging to them. Oranges, pine-apples and other tropical fruits grow here in the highest perfection. Coffee, cotton, indigo, sugar and cloves are also exported to a great amount, but for provisions the inhabitants are almost entirely dependent on Bourbon. The population in 1807 was 70,000, a large proportion of whom were blacks.

St. HELENA is on the S. W. side of Africa, in the Atlantic ocean, in lat. $15^{\circ} 5' S.$ lon. $5^{\circ} 49' W.$ about 1,200 miles from the coast of Africa and 1,800 from South America. It is 10 miles long and 7 broad, and presents to the sea, throughout its whole circuit, nothing but an immense wall of perpendicular rock, from 600 to 1,200 feet high, like a castle in the midst of the ocean. The island belongs to the British, and is principally remarkable as the prison of Napoleon Bonaparte from 1815 till his death in 1821. It is also frequently resorted to as a place of refreshment by ships returning from India.

ASCENSION is a small island, situated to the N. W. of St. Helena, in lat. $8^{\circ} 8' S.$ lon. $14^{\circ} 28' W.$ It is entirely barren and uninhabited; but is frequented by the homeward bound shipping, on account of its excellent harbor, and the fish, sea-fowl and turtle which it affords. The island of *St. Matthew* lies N. of Ascension island in lat. $1^{\circ} 24' S.$

GUINEA ISLANDS. 1. *Annobon* is a small island in lat. $1^{\circ} 32' S.$ about 300 miles west of cape Lopez. It contains about 4,000 inhabitants, who are a mixture of Portuguese and negroes. The island was ceded to the Spaniards in 1778, but the Portuguese appear to be still in possession of it. 2. *St. Thomas* is a Portuguese island, situated under the equator in lon. $6^{\circ} 25' E.$ Its soil is fertile, producing maize, rice and tropical fruits in abundance, but the climate is very unhealthy. The population, consisting of 15,000 or 18,000, is composed of a mixture of Portuguese and negroes. St. Thomas, the capital, has 3,000 inhabitants. 3. *Prince's island*, situated in the gulf of Benin, about 100 miles from the coast, in lat. $1^{\circ} 50' N.$ belongs also to the Portuguese. 4. *Fernando Po*, lying 150 miles north of Prince's island, is fertile and beautiful, but is little frequented by Europeans, the inhabitants being rude and uncivilized.

The **Cape Verde Islands**, 14 in number, are about 400 miles west of Cape Verde, between 15° and 18° N. lat. The climate is unwholesome and the soil for the most part rocky and barren. The principal exports are goat skins, tropical fruits; salt and saltpetre. The islands belong to the Portuguese, and the inhabitants, about 40,000 in number, are a mixture of Portuguese and negroes. The principal islands are *St. Jago*, which contains the capital, and *St. Nicholas*.

The **Canaries** are a group of islands near the west coast of Africa, between $27^{\circ} 39'$ and $29^{\circ} 26'$ N. lat. They are 13 in number, of which the most noted are Tenerife, Grand Canary and Ferro. This group was celebrated in antiquity, under the appellation of the Fortunate islands, and was considered as the extremity of the world. The island of Ferro, the most westerly of the group, was originally employed by all geographers as their first meridian. The aspect of all these islands is elevated and full of mountains, some of which rank among the loftiest on the globe, particularly the peak of Tenerife, which rises to the height of 12,176 feet above the level of the sea. The sides of the mountains which incline towards the west and north, make a profuse display of vegetation, and exhibit, rising above each other, the plants of the torrid, the temperate and even the frigid zone. The most fertile and verdant islands are Grand Canary and Tenerife. The most valuable production of the Canaries is wine, of which Tenerife yields from 20,000 to 24,000 pipes annually. Wheat, maize and potatoes are also cultivated.

These islands belong to the Spaniards, and the present inhabitants are entirely of European origin, the natives having long since been exterminated. The number of inhabitants is estimated at 160,000. They are of a roving and enterprising disposition, which impels them to emigrate; and they have established themselves in all the Spanish settlements in the New world, and in the East Indies.

MADEIRA, lying off the N. W. coast of Africa, between 32° and 33° N. lat. is 54 miles long, and is estimated to contain 1,100 square miles. The island consists altogether of a collection of lofty mountains, the highest of which rises upwards of 3,000 feet above the level of the sea. On the declivity of these mountains all the productions of the island are raised. The lower slopes are covered with vines, the loftier summits with forests of pine and chesnut. The soil produces wheat, barley and oats; but two thirds of the grain consumed in the island is derived from abroad. The commerce of the island consists almost entirely in the export of its wine to the annual amount of from 15,000 to 17,000 pipes. The best is that called London particular Madeira; the second, which is inferior, is called London market; the third is that suited to the India market; the fourth is for the New-York market; and there is a fifth, and still inferior kind, which is called cargo.

The principal trade is with the British and Americans. The island belongs to the Portuguese, and the inhabitants, estimated at 90,000, are almost wholly of Portuguese origin. *Funchal* is the capital of the island. Adjacent to Madeira are Porto Santo and the Desert isles. These, with Maderia itself, compose the group called the *Madeiras*.

The AZORES or WESTERN ISLANDS, 9 in number, lie in the Atlantic ocean, almost midway between Europe, Asia and Africa. They extend from 37° to 40° N. lat. and from 25° to 32° W. lon. The principal islands in the group are St. Michael, Fayal and Tercera. The surface of these islands is covered with hills of various forms and dimensions, all, apparently, the product of volcanic agency. The most terrible convulsions of nature seem to have been exhibited here on a stupendous scale. The islands have been at different times laid waste by earthquakes, of which the most formidable on record is that of 1591, which continued 12 days without interruption. The traces of these shocks appear in the mountains, many of them having been split in two, leaving a wide path between. Another phenomenon, still more extraordinary, is that of new rocks or islands, which have repeatedly emerged from the bosom of the ocean. The effect of subterraneous fire is also visible in numerous hot springs. The soil throughout these islands is exceedingly fertile, producing wheat, barley and maize much beyond the consumption of the inhabitants, together with vines, oranges, and other fruits. The best vines are raised on the lofty sides of mount Pico, which rises, in the island of the same name, to the height of 7,000 feet above the level of the sea. Angra, the capital of Tercera, is the seat of government. The islands belong to the Portuguese, and the population, estimated at 160,000, is almost entirely of Portuguese origin.

NORTHERN POLAR REGIONS.

New Discoveries.] The regions within the Arctic circle have been rendered interesting from the recent discoveries effected by the expeditions sent out by the British government in search of a north-west passage. The most successful of these expeditions was that under command of captain Parry, who left England in the spring of 1819, and passing through Davis's strait into Baffin's bay, reached the western shore of that bay in lat. 74° N. at a place which had been named by former voyagers Lancaster Sound. But instead of a Sound, captain Parry ascertained that it was a strait, leading directly into the Polar sea. It extends about 150 miles in a direction due east and west, the shores, bounding it to the north and south, being nearly parallel, at an average distance of 40 or 50 miles. To the now-ascertained

strait the name of Barrow's strait was given. In this the water was deep, and clear from ice; but on entering the Polar sea, the barrier of ice preventing further progress westward, capt. Parry bent his course in a southerly direction, and entered a large Sound or inlet, 25 miles in breadth. Having sailed 120 miles down this inlet, the ships were obstructed by ice, and returned to the western extremity of Barrow's straits, where the ice was found broken up to such an extent that they were enabled to proceed westward, and the ships pursued their course between the parallels of 71° and 75° , passing a number of islands, one of which, in about 104° W. lon. they named *Byam Martin island*. Proceeding still westward, a very large island was discovered, extending from 106° to 114° W. lon. and from $74^{\circ} 30'$ to nearly 76° N. lat. This island was called Melville island. The polar winter now commenced, and the ships anchored in a harbor on the south side of this island, where they were imprisoned by the ice during a period of 310 days. Having sailed again on the 6th of August, 1820, they reached the western extremity of Melville's island, in lon. 114° W. where, owing to the immense and impermeable barriers of ice, further progress became impossible, and the ships returned to England.

Outline of the Ice.] The ice in the northern Polar regions fills, on an average, a circle around the north pole of about 2,000 miles in diameter, and presents an outline, which, though subject to partial variations, is found at the same season of each succeeding year. to be generally similar and often strikingly uniform. With each recurring spring it presents the following general outline. Filling the bays of Hudson and Baffin, as well as the straits of Hudson and part of that of Davis, it exhibits an irregular, waving, but generally continuous line, from Newfoundland or Labrador to Nova Zembla.—From Newfoundland it extends in a northerly direction along the Labrador shore, generally preventing all access to the land as high as the mouth of Hudson's strait; then, turning to the N. E. forms a bay near the coast of Greenland, in lat. perhaps 66° or 67° by suddenly passing in a southerly direction to cape Farewell at the extremity of Greenland. The quantity of ice on the east side of Davis's strait, being often small, the continuity of its border is liable to be broken, so as to admit of ships reaching the land: and sometimes the bay of ice in 66° or 67° does not exist, but the sea is open up the strait to a considerable distance beyond it.—After doubling the southern promontory, or cape Farewell, the line advances in a N. E. course along the east coast, sometimes enveloping Iceland as it proceeds, until it reaches the island of Jan Mayen. Passing this island on the N. W. but frequently inclosing it, the edge of the ice then tends a little more to the east, and usually intersects the meridian of London, between 71° and 73° N. lat. Having reached the meridian of 6° or 8° E. lon. in 73° or 74° N. lat. it forms a remarkable promontory, and suddenly stretches to the north, sometimes proceeding on a meridian to the lat. of 80° N.: at other times, after running 2 or 3 degrees to the north, it turns and runs S.E. to Cherie

island, thus forming a deep bay. After passing Cherie island it assumes a more direct course a little S. of E. until it forms a junction with the Siberian or Nova Zembla coast. To the east of Nova Zembla, the ice, during the winter and spring, seems closely to embrace the whole of the northern shores of Russia, and filling in a great measure Behring's strait and the sea north of it, continues in contact with the polar face of the American continent.

That remarkable promontory, midway between Jan Mayen and Cherie islands, formed by the sudden stretch of the ice to the north constitutes the line of separation between the east or *whaling* and the west or *sealing* ice of the fishers. The deep bay lying to the east of this promontory may be called the Whale fisher's bay, and invariably forms the only pervious tract for proceeding to the most northerly fishing latitudes. When the ice at the extremity of this bay is so strong and compact as to prevent the approach to the shores of Spitzbergen, and the advance northward beyond the lat. of 75° or 76° it is said to be a *close* season; and on the contrary, it is an *open* season, when the navigation is uninterrupted along the whole western coast of Spitzbergen. In an open season, therefore, a large channel of water lies between the western coast of Spitzbergen and the ice, from 20 to 50 leagues in breadth, and extending to the latitude of 79° or 80° N. —The place where whales occur in the greatest abundance is generally found to be in 78° or 79° N. lat.—In *close* seasons, though the ice joins the southern part of Spitzbergen, and thus forms a barrier against the fishing stations, yet it is often of limited extent, from 20 to 30 or 40 leagues across in the shortest diameter, and beyond this is an open sea forming the retreat of the whales. This formidable barrier, whenever it occurs, is regularly encountered by the whale ships in the month of April, though it costs the fisherman immense labor and anxiety to penetrate it. It is generally removed by natural means as the season advances, so that he rarely meets with any difficulty in his return.

GENERAL VIEWS.

GENERAL TABLE. Showing the number of square miles of each state in the Union; the population in 1820; the average population on a square mile; the estimated value of manufactures in 1810; the value of houses and lands in 1815; and the time when each state was admitted into the Union.

1	2	3	4	5	6	7	8	9
States.	Square miles.	Population in 1820.	Pop. on a sq. m.	Estimated value of manufactures in 1810.	Proportion of each inhabitant.	Value of houses and lands in 1815	Proportion of each inhabitant.	When admitted into the Union.
				Dollars.	D. C.	Dollars.	D. C.	
Maine.	31,750	298,335	10	3,741,116	16 40			1820
N. H.	9,491	244,161	26	5,225,045	24 41	38,745,974	172 52	*
Mass.	7,250	523,287	72	21,895,528	46 39	†143,765,560	†190 22	*
R. I.	1,580	83,059	53	4,106,074	53 39	20,907,766	264 63	*
Conn.	4,764	275,248	58	7,771,928	29 66	88,534,971	332 33	*
Vt.	10,212	235,764	23	5,407,280	25 00	32,461,120	144 91	1791
N. Y.	46,000	1,372,812	30	25,370,286	26 45	269,370,900	244 88	*
N. J.	8,320	277,575	33	7,054,594	28 78	95,899,333	374 60	*
Pa.	46,000	1,049,398	23	33,691,111	41 59	346,633,889	389 47	*
Dela.	2,120	72,749	34	1,733,744	23 84	13,449,370	186 79	*
Md.	13,959	407,350	29	11,468,794	30 00	106,496,638	273 76	*
Va.	64,000	1,065,366	17	15,263,473	15 66	165,608,199	164 78	*
N. C.	48,000	638,829	13	6,653,152	11 98	51,517,031	88 36	*
S. C.	24,000	490,309	20	3,623,595	8 72	74,325,262	165 13	*
Geo.	60,000	340,989	6	3,658,481	14 54	31,487,658	111 20	*
Ala.	44,000	127,901	3	419,073	13 51			1819
Miss.	45,000	75,448	2					1817
Lou.	48,000	153,407	3	1,222,357	16 08			1811
Ten.	40,000	422,813	11	3,611,029	13 83	24,243,750	77 21	1796
Ken.	42,000	564,317	13	6,181,024	15 22	66,878,587	145 39	1792
Ohio,	39,000	581,434	15	2,894,290	12 58	61,347,215	176 80	1802
Ind.	36,000	147,178	3	300,000	12 50			1816
Illi.	52,000	55,211	1	120,000	10 00			1818
Misso.	60,000	66,586	1	200,000	10 00			1820
MichT	40,000	8,896		50,000	10 00			
Ark.T.		14,273						
Col.D.	100	33,039	330	1,100,000	45 83			
Total,		9,625,734		172,762,676	17 95	1,631,657,224	230 00	

† Including Maine.

* Original states.

Remarks. The numbers in the fifth column, showing the value of the manufactures in 1810, are an estimate, made by Mr. Tench Coxe of Philadelphia, and founded principally upon the official returns made to the government. These returns were in many cases very imperfect, and the deficiency was supplied by the estimate of Mr. Coxe, at the request of the Secretary of the Treas-

ury.—The numbers in the sixth column are obtained by dividing the estimated value of the manufactures in each state by its population. They enable us, of course, to determine at a single view which state manufactures most in proportion to its population.—The numbers in the eighth column are obtained by dividing the value of houses and lands in 1815 by the population. They show us at a single glance in which states the inhabitants on an average are most wealthy, so far as real estate is concerned.

Questions. 1. Which is the largest state in the Union? 2. Which is the smallest? 3. Which state contains less than 10,000 square miles? 4. Which states contain more than 30,000? 5. Which state contains the greatest population? 6. Mention the five next in the order of their population. 7. Which of the states is most thickly settled? 8. Which next? 9. Which next? 10. Mention the states that contain less than 10 on a square mile. 11. Mention those that contain more than 30. 12. Which state is the first in the value of manufactures? 13. Which next? 14. Which next? 15. Which state manufactures most in proportion to its population? 16. Which next? 17. Which next? 18. In which state is the value of houses and lands the greatest? 19. In which state are the inhabitants most wealthy so far as real estate is concerned? 20. In which, next? 21. In which, next? 22. How much real estate has each individual in the Union, on an average? 23. Mention the names of the thirteen original states. 24. Mention the names of the new states in the order in which they were admitted into the Union.

TABLE II. Showing the *total population* of each of the United States according to the enumerations in 1790, 1800, 1810 and 1820, with the increase and rate of increase between those periods.

States.	Population.				Increase from 1790 to 1820.	Rate of Increase		
	In 1790	In 1800	In 1810	In 1820		1790-1800 per c.	1800-1810 per c.	1810-1820 per c.
Maine,	96,540	151,719	228,705	298,335	201,795	57.2	50.7	30.4
N. H.	141,895	183,858	214,460	244,161	102,276	29.6	16.6	13.8
Vt.	85,539	154,465	217,895	235,764	150,225	80.5	41.0	8.2
Mass.	378,787	422,845	472,040	523,287	144,500	11.5	11.6	10.9
R. I.	68,825	69,122	76,931	83,050	14,234	0.4	11.4	8.0
Conn.	237,946	251,002	261,942	275,248	37,202	5.6	4.3	5.1
N. Y.	340,120	586,050	959,049	1,372,812	1,032,692	72.0	63.6	43.1
N. J.	184,139	211,149	245,562	277,575	93,436	14.3	16.5	13.0
Pa.	437,373	602,548	810,091	1,049,396	615,025	38.6	34.4	29.5
Dela.	59,094	64,273	72,674	72,749	13,645	8.7	13.0	0.1
Md.	319,728	349,692	380,546	407,350	87,622	6.8	11.4	7.0
Va.	747,610	886,149	974,622	1,065,366	317,756	17.6	10.7	9.3
N. C.	393,751	478,103	555,500	638,829	245,078	21.4	16.2	11.4
S. C.	240,073	345,591	415,115	490,309	250,236	38.6	20.1	18.1
Geo.	82,548	162,686	252,433	340,939	258,441	97.0	55.1	35.1
Ala. }		8,850	31,502	75,448			356.0	545.0
Miss. }								
Lou.			76,556	153,407				100
Ten.	35,691	105,602	261,727	422,813	387,122	196.0	147.8	61
Ken.	73,677	220,959	406,511	564,317	490,640	200.0	83.9	39
Ohio,	3,000	45,365	230,760	581,434	578,434	1400	408	162
Ind.		4,875	24,520	147,178			408	500
Illi.		215	12,282	55,211			5609	351
Miss.			19,783	66,586				236
Ark. T.			1,062	14,273				1244
Mich. T.		551	4,762	8,896			764.2	88
Col. D.		14,093	24,023	33,039			70.0	37.6
Total,	3,929,328	5,306,035	7,239,903	9,625,734	5,696,406	35.1	34.6	32.9
1	2	3	4	5	6	7	8	9

Remarks. In 1790, the population of the Union was almost confined to the country on the Atlantic coast; the states west of the Alleghany mountains containing scarcely 100,000 inhabitants. Since that period, thousands have migrated every year to the states west of the mountains, and in 1820, those states, including Alabama and Mississippi, contained more than 2,000,000 inhabitants. Emigrants have also flocked in great numbers to Georgia, Vermont, Maine, and especially to the western district of New-York, which was almost a wilderness in 1790. The states which have lost most by these migrations are Massachusetts, Connecticut, Rhode-Island, New-Jersey, Delaware, Maryland, Virginia, and the Carolinas. At the present time the tide of emigration appears to be flowing with great rapidity towards Indiana, Illinois, Missouri, Alabama, and Mississippi.

From the table it appears that the population of the United States has increased 32.9 per cent. between 1810 and 1820. At this rate it will double in about 25 years. The ratio of increase, however, seems to be gradually diminishing. Between 1790 and 1800 it was 35.1 per cent. ; and between 1800 and 1810 only 34.6 per cent. Still, there is no reason to apprehend that it will be materially less during the next 30 years, than it has been hitherto.—Very little of the increase is to be attributed to the immigration of foreigners. According to the best estimates the number of foreigners who have arrived in this country has not hitherto averaged more than 5,000 or 6,000 annually ; while the natural increase of the population is nearly 300,000. In some years probably as many persons have emigrated from the United States to Canada as have arrived from Europe. The population of Upper Canada is composed principally of emigrants from the United States.

Questions. 1. Which state contained the greatest population in 1790 ? which, in 1800 ? which, in 1810 ? which, in 1820 ? 2. Which state increased *most* between 1790 and 1820 ? 3. Which, next ? 4. Which, next ? 5. Which, next ? 6. Which states increased more than 100 per cent. between 1790 and 1800 ? 7. Which, between 1800 and 1810 ? 8. Which, between 1810 and 1820 ? 9. Which states increased less than ten per cent. between 1790 and 1800 ? 10. Which, between 1800 and 1810 ? 11. Which, between 1810 and 1820 ? 12. What was the population of the western states in 1790 ? 13. What, in 1820 ? 14. Did the population of the United States increase as fast between 1810 and 1820 as between 1790 and 1800 ? 15. Has the population of the United States been much increased by the immigration of foreigners ?

TABLE III. Showing the rate of increase of the white and of the black population in each state, between the several national enumerations.

States.	Ten years. From 1790 to 1800.		Ten years. From 1800 to 1810.		Ten years. From 1810 to 1820.		Thirty years. From 1790 to 1820.	
	Whites per c.	Blacks per c.	Whites per c.	Blacks per c.	Whites per c.	Blacks per c.	Whites per c.	Blacks per c.
Maine.	57.2	52.0	50.9	13.4	30.5	-4.2	209.6	72.7
N. H.	29.6	9.1	16.6	12.7	13.9	-18.1	72.4	00
Vt.	80.5	105.5	41.1	34.6	8.1	24.0	175.5	238.0
Mass.	11.4	18.0	11.7	4.4	10.9	0.5	38.3	23.5
R. I.	1.5	-13.0	11.8	0.9	8.4	-3.1	23.2	-17.5
Conn.	5.3	12.7	4.3	7.6	4.7	17.9	14.9	43.5
N. Y.	76.7	19.2	65.5	30.2	45.0	2.4	324.0	51.5
N. J.	14.4	11.5	16.7	11.1	13.5	7.1	51.5	41.3
Pa.	38.2	58.6	34.3	43.1	29.4	30.7	140.0	197.0
Dela.	7.6	13.5	11.0	20.0	-0.0	.8	19.3	36.8
Md.	3.6	12.8	8.0	16.1	11.1	1.1	24.7	32.5
Vir.	16.3	19.4	7.2	15.8	9.3	9.2	36.4	51.3
N. C.	17.0	33.0	11.4	27.6	11.3	22.6	45.4	108.0
S. C.	40.0	37.0	9.1	34.5	8.2	28.6	76.7	136.0
Geo.	93.6	103.7	42.2	77.1	30.2	41.5	258.0	411.0
Ala.			344.5	372.0	454.6	340.0		
Miss.								
Lou.					113.5	88.3		
Tenn.	187.3	267.7	135.4	230.0	57.4	80.7	965.0	2136.0
Ken.	194.2	227.5	80.2	100.2	37.1	57.4	611.6	935.0
Ohio,			408.2	463.0	152.0	157.0	19000	
Ind.			421.9	211.4	512.0	131.6		
Ill.					367.7	84.0		
Misso.					*298.0	*240.0		
Mich ^t			764.4	747.0	863.1	20.0		
Col.D.			60.7	97.2	40.1	31.4		
Total,	35.6	32.4	35.0	32.8	34.0	28.0	147.6	133.0
1	2	3	4	5	6	7	8	9

* Including Arkansas Territory.

Remarks. From the above table it appears that, taking the whole United States together, the whites increase faster than the blacks. During the last 30 years the proportion has been as 147 to 133. But in the states in which the blacks are very numerous they have almost uniformly increased faster than the whites of those states. In Maryland, Virginia, North Carolina, South Carolina, Georgia, Tennessee and Kentucky, for example, the blacks during the last 30 years, have increased much faster than the whites. In North Carolina and Tennessee they have increased more than as fast again. In South Carolina, during the last ten years, they have increased more than three times as fast, the proportion being as 28 to 8. In the northern states, on the other hand, the black population is almost stationary, and in Maine, New-Hampshire and Rhode Island, during the last ten years, but

actually diminished. The increase of the black population between 1810 and 1820 was considerably less than between 1800 and 1810. This appears to be owing in part to the prohibition of the importation of slaves, which took effect on the 1st of Janu. 1808.

Questions. 1. Which increased fastest between 1790 and 1820, the white or black population of the United States? 2. Which, the fastest, the white or black population of Pennsylvania? of Delaware? of Maryland? of Virginia? North Carolina? South Carolina? Georgia? Tennessee? Kentucky? Maine? New-Hampshire? Massachusetts? Rhode Island? Connecticut? New-York? 3. How much faster did the blacks increase than the whites between 1810 and 1820, in South Carolina? in North Carolina? 4. When did the blacks increase fastest, between 1800 and 1810, or between 1810 and 1820? 5. To what cause is the difference to be ascribed.

TABLE IV. Showing the number of whites and the number of blacks in the several states at each of the four national enumerations.

States.	Whites.				Blacks.			
	1790	1800	1810	1820	1790	1800	1810	1820
Maine,	96,002	150,901	227,736	297,340	531	811	969	929
N. H.	141,097	182,990	213,490	243,236	788	960	970	786
Vt.	85,298	153,908	217,145	234,846	271	557	750	913
Mass.	373,324	416,393	465,303	516,419	5,463	6,452	6,737	6,740
R. I.	64,470	65,438	73,214	79,413	4,355	3,684	3,717	3,602
Conn.	232,374	244,751	255,179	267,181	5,572	6,281	6,763	7,967
N. Y.	314,142	555,063	918,699	1,332,744	25,973	30,982	40,350	39,367
N. J.	169,954	194,325	226,363	257,409	14,185	16,824	18,694	20,017
Penn.	424,099	566,278	786,804	1,017,094	10,274	16,270	23,287	30,413
Dela.	46,308	49,352	55,361	55,222	12,786	14,421	17,317	17,467
Md.	208,649	221,993	235,117	260,222	111,079	125,222	145,429	147,128
Va.	442,117	518,674	551,534	603,002	305,493	365,920	423,083	462,042
N. C.	288,204	337,964	376,410	419,200	105,547	140,339	179,090	219,829
S. C.	131,178	196,259	214,196	231,812	103,895	149,336	200,919	258,497
Geo.	52,886	101,068	145,414	189,566	29,662	60,423	107,019	151,439
Ala.				85,451				42,450
Miss.		5,179	23,024	42,176		3,671	17,238	33,272
Lou.			34,311	73,382			42,245	79,540
Ten.	31,913	91,709	215,875	339,727	3,778	13,893	45,852	82,826
Ken.	61,133	179,375	324,237	434,644	12,544	41,084	82,274	129,491
Ohio,	3,000	45,023	228,861	576,572		337	1,899	4,723
Ind.		4,577	23,890	145,758		298	630	1,420
Illi.		200	11,501	53,788		7	781	1,374
Misso.			*17,227	56,018			*3,618	10,569
Mich. T.		534	4,618	8,591		17	144	174
Ark. T.				12,582				1,676
Col. D.		10,066	16,079	22,614		4,023	7,944	10,425
Total,	3,172,120	4,304,306	5,862,093	7,856,269	757,208	1,001,729	1,377,810	1,764,836

* Including Arkansas Territory.

Remark. The black population includes slaves and free colored persons.

Questions. 1. Which state contained the greatest white population in 1790? which, in 1800? which, in 1810? which, in

1820? 2. Which state has the greatest black population? 3. Which, next? 4. Which, next? 5. Which states contain more than 50,000 blacks? 6. What is the amount of the black population of the United States?

TABLE V. Showing the proportion of the sexes in the free white population of each state, in 1790, 1800, 1810 and 1820; and in the slave and free colored population in 1820.

States.	Number of Females to every 100 Males.					
	Whites.				Slaves-Free blacks.	
	1790.	1800.	1810.	1820.	1820.	1820.
Maine,	95.39	96.27	97.15	99.36	None	112.25
New Hampshire,	93.90	100.52	101.44	104.05	None	111.02
Vermont,	90.48	94.01	97.45	100.20	None	109.58
Massachusetts,	104.07	102.92	102.53	104.33	None	103.75
Rhode Island,	102.66	105.46	104.33	106.53	166.66	123.81
Connecticut,	102.19	101.92	101.92	104.26	162.16	103.72
New-York,	94.12	93.53	93.68	96.12	102.24	118.06
New-Jersey,	96.11	96.91	96.64	98.63	89.44	94.20
Pennsylvania,	99.77	94.36	95.93	96.87	148.23	104.04
Delaware,	93.55	99.14	97.67	98.12	76.51	100.32
Maryland,	94.53	95.50	95.63	97.55	90.65	112.21
Virginia,	94.70	96.19	96.94	97.87	94.81	106.99
North Carolina,	95.40	96.77	99.01	99.92	92.89	97.65
South Carolina,	91.11	94.47	95.45	96.41	98.08	106.94
Georgia,	94.81	89.48	91.72	92.64	97.18	107.16
Alabama,				86.48	92.16	79.56
Mississippi,				81.42	95.02	91.63
Louisiana,			81.15	77.65	89.03	131.00
Tennessee,		94.56	93.15	95.92	101.66	81.57
Kentucky,	89.78	92.08	92.07	93.85	95.16	84.79
Ohio,		84.30	91.27	91.80	None	92.46
Indiana,		77.93	90.00	90.22	93.37	88.37
Illinois,		80.87	80.25	82.94	67.33	92.72
Missouri,				80.70	91.53	86.56
Michigan Territory,		62.31	62.80	59.57	None	65.71
Arkansas Territory,				80.49	97.19	31.81
Columbia District,		89.64	97.63	102.43	112.07	134.50
Total,	96.38	96.11	96.17	97.28	95.18	107.09
1	2	3	4	5	6	7

Remarks. Taking the whole black population together, the number of males was to the number of females in 1820, as 100 to 96.6. There is no essential difference, therefore, in the proportion of the sexes, between the white and black population. It is worthy of remark, in the above table, that the proportion of white females in 1820, was more than one per cent. greater than in 1810. The difference is doubtless to be ascribed to the number of soldiers who perished during the late war in battle and by disease. This number was at least 40,000, which is about

the difference to be accounted for. In the old countries of Europe, the number of females, after long wars, is sometimes 10 per cent. greater than that of the males. In Great Britain and Ireland, in 1811, there were for every 100 males 109.99 females.

It is also worthy of remark, that in the new states, the number of females is much less in proportion, than in the old states. The difference is satisfactorily accounted for by the fact that the emigrants to newly settled lands are generally young men, many of whom are without families. In Alabama, Mississippi, Indiana, Illinois, Missouri, Michigan Territory, and Arkansas Territory, in all of which the settlements are still in their infancy, the number of females in 1820, was but little more than 80 for every 100 males; while in New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut, all of which lost many of their inhabitants by emigration, the number of females was greater than that of the males. The excess of females in the New-England states, and particularly in Massachusetts, is also ascribed in part to the great number of men engaged in a seafaring life, in which they are not only exposed to peculiar hazards, but are frequently without a fixed place of residence, and are absent at sea at the time of taking the census.

It is also worthy of remark, that in Louisiana and Michigan territory the number of white females is uncommonly small. This deficiency is compensated in Louisiana by a very unusual proportion of free colored females; and in Michigan territory perhaps by Indians and mestizoes, who do not appear in the census. The proportion of free colored females in the District of Columbia is unusually large.

Questions.] 1. How many white females were there to every 100 white males in the United States in 1790? 2. How many, in 1800? 3. How many in 1810? 4. How many, in 1820? 5. What was the occasion of the increased proportion of females in 1820? 6. Is there any essential difference in the proportion of the sexes, between the white and black population? 7. In which states were the white females more numerous than the white males in 1820? 8. To what is the excess of females in these states to be ascribed? 9. In which states were there less than 90 white females to every 100 white males in 1820? 10. To what is the deficiency in the number of females in these states to be attributed?

TABLE VI. Showing *what proportion* of the free white population were under ten years of age; between 10 and 16; 16 and 26, &c. according to the census of 1820.

States.	Free white Males.					Free White Females.				
	Under ten years of age	Of 10 and under 16.	Of 16 and under 26.	Of 26 and under 45.	Of 45 and upwards.	Under ten years of age	Of 10 and under 16.	Of 16 and under 26.	Of 26 and under 45.	Of 45 and upwards.
Maine,	16.65	8.25	9.60	9.33	6.55	15.67	8.06	10.36	9.50	6.33
N. H.	14.58	8.08	9.33	9.40	7.55	14.19	7.75	10.17	10.57	8.19
Mass.	13.75	7.46	9.58	10.54	7.48	13.41	7.42	10.22	11.17	8.94
R. I.	14.53	7.38	9.56	9.59	7.41	13.74	7.26	10.58	10.92	9.01
Conn.	13.79	7.74	9.67	9.59	8.16	13.21	7.42	10.18	10.84	9.35
Vermont	15.20	8.19	10.27	9.38	6.89	15.04	7.91	10.52	10.08	6.43
N. Y.	16.70	7.82	9.96	10.40	6.09	16.24	7.64	9.93	9.74	5.43
N. J.	16.34	7.75	9.57	9.51	7.20	15.51	7.57	9.98	9.72	7.00
Pa.	17.24	7.57	10.08	9.54	6.33	16.48	7.71	9.97	9.27	5.85
Dela.	17.37	8.52	10.75	10.72	6.25	16.58	8.25	10.67	10.87	6.32
Md.	15.95	7.28	10.14	10.73	6.52	15.16	7.52	10.45	10.12	6.09
Virginia,	17.22	7.58	9.75	9.61	6.33	16.32	7.58	10.34	9.27	5.91
N. C.	18.00	7.35	9.43	8.65	6.07	16.93	7.89	10.79	9.08	5.99
S. C.	17.99	7.68	10.07	9.30	5.86	16.30	7.69	10.00	8.90	5.58
Georgia,	18.60	7.73	10.22	9.38	5.70	17.42	7.84	9.78	8.06	4.74
Alabama,	19.56	7.18	10.68	10.36	4.65	18.09	7.19	9.14	7.58	3.31
Miss.	19.25	7.63	10.82	12.13	5.37	17.15	7.54	9.00	7.37	3.79
Louis.	16.26	6.42	11.92	15.33	6.58	15.09	7.48	9.15	7.76	4.23
Tenn.	19.93	8.38	9.13	8.04	5.52	18.66	8.17	9.28	8.23	4.60
Ken.	19.11	8.28	9.51	8.76	5.76	17.63	8.08	9.64	8.16	4.76
Ohio,	19.37	7.95	9.89	9.45	5.49	18.39	7.65	9.25	8.46	4.11
Indiana,	20.34	7.86	9.90	9.59	4.85	19.00	7.35	9.35	8.24	3.47
Illinois,	19.65	7.87	13.45	10.71	4.91	17.79	7.47	9.01	7.76	3.36
Missouri,	19.06	7.60	11.67	11.82	5.19	17.44	7.10	9.06	7.61	3.39
Mich. T.	14.35	6.57	15.22	18.36	7.16	13.29	6.17	8.14	7.00	3.13
Ark. T.	19.20	7.88	11.41	11.62	5.48	17.13	7.20	9.43	7.47	3.41
Col. Dis.	14.49	6.81	9.59	12.80	5.71	14.68	7.26	11.14	11.57	5.97
Total,	17.11	7.79	9.62	9.74	6.29	16.28	7.70	9.93	9.37	5.88
1	2	3	4	5	6	7	8	9	10	11

Remarks. From the 6th and 11th columns it appears that the proportion of persons in Connecticut, Rhode island, Massachusetts and New-Hampshire, over 45 years of age, is much greater, than in any other part of the Union. It must not be inferred however, from this, that the climate of those states is more favourable to life. The difference is doubtless the effect of emigration. Large numbers of young people have recently gone from those states to the western country, and the aged, who remain behind, of course constitute a greater proportion of the population. Accordingly we find that in the new states, particularly in those where the settlements have just commenced, the proportion of aged persons is very small. In Alabama, Mississippi, Indiana, Illinois, and Missouri, it is not more than half as great as in New-England. The difference is most striking among the females.

The children under ten years of age are of course the offspring, almost entirely, of the females between 16 and 45; yet it is remarkable, that in those parts of the country where the females between these ages are most numerous, the proportion of children is the smallest; and on the contrary, where the females between these ages are least numerous, the proportion of children is the greatest. For example, in New Hampshire, Massachusetts, Rhode-Island, Connecticut, and the District of Columbia, where the females between 16 and 45 constitute more than 21 per cent. of the population, the children, including both males and females, make less than 23 per cent.; while in Alabama, Mississippi, Indiana, Illinois and Missouri, where the females between these ages make only 17 per cent. of the population, the children make nearly 33 per cent. This seems to prove, that in the old states the number of females *not married* between the ages of 16 and 45 is much larger in proportion than in the new states. If the number of children under ten years of age is a fair criterion of the number of married females between 16 and 45, then, in the same amount of population, there are 12 married females in Alabama, Mississippi, &c. where there are 7 in the old states of New England. This would prove that at least five twelfths of the females in New England between 16 and 45 are not married.

In Michigan territory there are several wide deviations from the common proportions. The proportion of men between 16 and 45 is uncommonly large. This is probably owing to the fur traders, who are considerable numerous, and have long been in the habit of intermarrying with the Indians. The proportion of white females between 16 and 45 is, therefore, as we should expect, uncommonly small, their place being supplied by Indian women. The number of children is also small, because those of the mixed breed do not appear in the census.

The proportion of men in Louisiana between 16 and 45 is uncommonly large. This is probably to be attributed to the number of young men engaged in commercial pursuits in the city of New-Orleans.

From the lower column of the table it appears that 33.39 per cent. or one third of the population of the United States, consists of children under ten years of age. Nearly one sixth part is composed of persons between 10 and 16; nearly one fifth, of persons between 16 and 26; nearly one fifth of persons between 26 and 45; and about one eighth of persons over 45.

Questions. 1. How large a proportion of the population consists of children under 10 years of age? 2. What proportion is between 10 and 16? 3. What proportion, between 16 and 26? 26 and 45? 45 and upwards? 4. In which states are aged persons most numerous? In which states are they least numerous? 5. What is the occasion of the difference? 7. In which states is the proportion of females between 16 and 45 greatest? In which states is it least? 8. In which states are the children under 10 years of age most numerous? In which, are they the least numerous.

TABLE VII. Showing what number of the free white population were under 10 years of age; between 10 and 16; 16 and 26, &c. according to the census of 1820.

States.	Free White Males.					Free White Females.			
	Under ten years of age	Of 10 and under 16.	Of 16 and under 26.	Of 26 and under 45.	Of 45 and upwards.	Under ten years of age	Of 10 and under 16.	Of 16 and under 26.	Of 26 and upwards.
Maine,	49,217	24,528	28,530	27,742	19,178	46,565	23,982	30,823	28,2
N. H.	35,466	19,672	22,703	22,956	18,413	34,599	18,899	24,806	25,7
Mass.	70,993	38,573	49,506	54,414	38,668	69,260	38,308	52,805	57,7
R. I.	11,530	5,860	7,596	7,618	5,888	10,917	5,769	8,407	8,8
Conn.	36,848	20,682	25,831	25,632	21,814	35,289	19,833	27,205	29,0
Vt.	35,708	19,241	24,137	22,035	16,189	35,327	18,577	24,713	23,6
N. Y.	222,608	104,297	132,753	138,634	81,259	216,513	101,904	132,492	129,8
N. J.	42,055	19,970	24,639	24,418	18,537	39,921	19,504	25,637	24,6
Pa.	175,381	77,050	102,550	97,144	64,493	166,710	78,425	101,404	94,3
Dela.	9,071	4,448	5,516	5,607	3,263	8,657	4,311	5,573	5,5
Md.	41,511	18,952	26,404	27,916	16,960	39,454	19,578	27,293	26,3
Va.	103,963	45,762	58,863	57,898	38,245	98,485	45,766	62,411	55,9
N. C.	75,488	32,912	39,527	36,264	25,453	70,998	33,101	42,253	39,0
S. C.	41,701	17,825	23,354	21,578	13,589	38,963	18,305	23,156	20,4
Geo.	35,444	14,743	19,483	17,874	10,860	33,177	14,937	18,642	15,3
Ala.	17,103	6,281	9,336	9,055	4,064	15,810	6,289	7,993	6,6
Missi.	8,104	3,216	4,560	5,110	2,290	7,220	3,176	3,791	3,1
Lou.	11,817	4,710	8,747	11,236	4,822	11,062	5,484	6,708	5,6
Tenn.	67,746	28,497	31,028	27,349	18,780	63,419	27,770	31,569	27,9
Ken.	83,050	36,004	41,328	38,178	25,136	77,641	35,120	41,905	35,4
Ohio,	111,683	45,858	57,008	54,432	31,626	106,036	44,106	53,337	48,7
Ind.	29,629	11,454	14,428	14,072	7,066	27,684	10,707	13,635	12,0
Ill.	10,554	4,227	6,224	5,755	2,641	9,558	4,018	4,842	4,1
Misso.	10,677	4,256	6,537	6,622	2,909	9,766	3,978	5,076	4,2
Mich T	1,220	559	1,334	1,661	609	1,130	525	692	5
Ark. T.	2,420	985	1,427	1,453	686	2,142	900	1,179	8
Col. D.	3,276	1,540	2,171	2,893	1,291	3,319	1,640	2,518	2,6
Total,	1,344,263	612,102	755,520	765,546	494,735	1,279,622	604,912	780,865	736,0
1	2	3	4	5	6	7	8	9	10

TABLE VIII. Comparing the ages of the Slaves with those of the free colored population of the United States.

Classes.	Males.				Females.			
	Under 14 years of age.	14 to 26.	26 to 45.	45 and upwards.	Under 14 years of age.	14 to 26.	26 to 45.	45 and upwards.
Slaves,	22.36	13.20	10.64	5.03	21.10	13.16	9.92	4.59
Free colored,	20.42	10.30	10.04	7.53	19.66	12.34	11.64	7.11
Total Blacks,	22.10	12.82	10.56	5.35	20.90	13.05	10.15	5.05

Remarks. The proportion of free colored persons over 45 years of age is much greater than that of the slaves. It cannot be inferred from this circumstance that there is any thing in the situation of the slaves prejudicial to long life. The difference is doubtless owing to the emancipation of slaves who are advanced in life. The proportion of free colored females between 26 and 45 is much greater than that of the female slaves between the same ages; yet the free colored children under 14 years of age are less numerous than the children of the slaves. This seems to indicate that the slaves are increasing faster than the free colored persons, and of course that their condition is happier.

TABLE IX. Comparing the ages of the white and black population of the United States.

Classes.	Males.			Females.		
	Under 26.	26 to 45.	45 and upwards.	Under 26.	26 to 45.	45 and upwards.
Whites,	34.52	9.74	6.29	33.91	9.37	5.88
Blacks,	34.92	10.56	5.35	33.95	10.15	5.05

Remarks. From this table it appears that 12.17 per cent. of the white population are upwards of 45 years old, while of the blacks the proportion is only 10.40 per cent. making a difference of nearly one sixth in favor of the longevity of the whites. If we make the comparison, however, with the whites of the southern states, the result would be less favorable. In the states south of Pennsylvania and the river Ohio, including Missouri and Louisiana, only 11.23 per cent. of the white population are more than 45 years old.

TABLE II. Showing the number of free blacks and slaves in each of the United States in 1850; together with the whole number of blacks and whites, and the proportion which each class forms of the whole population.

States.	Blacks.			Whites.	Proportion of the whole population.	
	Free Blacks.	Slaves.	Total Blacks.		Blacks. Whites.	
					per ct.	per ct.
Maine,	929	None.	929	297,340	0.31	99.69
N. Hampshire,	786	None.	786	243,236	0.32	99.68
Massachusetts,	6,740	None.	6,740	516,419	1.28	98.72
Rhode Island,	3,554	48	3,602	79,413	4.34	95.66
Connecticut,	7,870	97	7,967	267,181	2.89	97.11
Vermont,	913	None.	918	234,846	0.39	99.61
New York,	29,279	10,088	39,367	1,332,744	3.67	96.33
New Jersey,	12,460	7,557	20,017	257,409	7.21	92.79
Pennsylvania,	30,202	211	30,413	1,017,094	2.90	97.10
Delaware,	12,958	4,509	17,467	55,232	24.02	75.98
Maryland,	39,730	107,398	147,128	260,222	36.12	63.88
Virginia,	36,889	425,153	462,042	603,003	43.37	56.63
N. Carolina,	14,612	205,017	219,629	419,200	34.38	65.62
S. Carolina,	6,714	251,763	258,477	231,812	52.72	47.28
Georgia,	1,763	149,676	151,439	189,566	44.42	55.58
Alabama,	571	41,879	42,450	85,451	33.19	66.81
Mississippi,	458	32,814	33,272	42,176	44.12	55.88
Louisiana,	10,476	69,064	79,540	72,383	51.35	48.65
Tennessee,	2,729	80,097	82,826	339,727	19.59	80.41
Kentucky,	2,759	126,732	129,491	434,644	22.94	77.06
Ohio,	4,723	None.	4,723	576,572	0.81	99.19
Indiana,	1,230	190	1,420	145,758	0.96	99.04
Illinois,	457	917	1,374	53,788	2.49	97.51
Missouri,	347	10,222	10,569	56,018	15.89	84.11
Michigan Ter.	174	None.	174	8,591	1.97	98.03
Arkansas Ter.	59	1,617	1,676	12,582	11.20	88.80
Columbia Dis.	4,048	6,377	10,425	22,614	31.59	68.41
Total,	233,400	1,531,436	1,764,836	7,856,269	18.33	81.67

Questions. 1. In which four states are the free blacks most numerous? 2. Which state contains the greatest number of slaves? Which, next? Which, next? 3. Mention the states in which there are no slaves. 4. In which states do the blacks form the majority of the population? 5. In which do they constitute more than one third part? 6. In which do they constitute less than 5 per cent. of the population?

TABLE XL Showing the number of persons engaged in Agriculture, Commerce, and Manufactures, and also the number of foreigners not naturalized in each of the United States; together with the proportion which each class forms of the whole population.

States.	Persons engaged in						Foreigners, not naturalized.	
	Agriculture.		Commerce.		Manufactures.		Num-ber.	Propor-tion.
	Number.	Proportion.	Num-ber.	Proportion.	Num-ber.	Proportion.		
Maine,	55,031	18.5	4,297	1.5	7,643	2.5	1,680	.5
N. H.	52,384	21.4	1,068	.4	8,699	3.5	124	.05
Mass.	63,460	12.1	13,301	2.5	33,464	6.4	3,425	.6
R. I.	12,559	15.1	1,162	1.4	6,091	7.3	237	.28
Conn.	50,518	18.4	3,581	1.3	17,541	6.4	568	.2
Vt.	50,951	21.6	776	.3	8,484	3.6	935	.4
N. Y.	247,648	18.0	9,113	.66	60,038	4.3	15,101	1.1
N. J.	40,812	14.4	1,830	.66	15,941	5.7	1,529	.6
Pa.	140,801	13.4	7,083	.67	60,215	5.7	10,728	1.0
Dela.	13,259	18.2	533	.73	2,621	4.0	331	.4
Md.	79,135	19.4	4,771	1.2	18,840	4.5	3,776	.9
Vir.	276,422	25.9	4,509	.4	32,336	3.0	2,142	.2
N. C.	174,196	27.3	2,551	.4	11,844	1.8	415	.06
S. C.	161,560	32.9	2,588	.5	6,488	1.3	1,205	.2
Geo.	101,185	29.6	2,139	.6	3,557	1.0	453	.1
Ala.	30,642	24.0	452	.3	1,412	1.1	162	.1
Miss.	22,033	29.2	294	.4	650	.9	181	.2
Lou.	53,941	35.1	6,251	4.1	6,041	4.0	3,145	2.0
Tenn.	101,919	24.1	882	.2	7,860	1.3	312	.07
Ken.	132,161	23.4	1,617	.3	11,779	2.0	529	.1
Ohio,	110,991	19.0	1,459	.2	18,956	3.3	3,495	.6
Ind.	31,074	21.1	429	.3	3,229	2.2	833	.5
Ill.	12,395	22.5	233	.4	1,007	1.8	598	1.1
Miss.	14,247	21.4	495	.8	1,952	3.0	497	.8
MichT	1,468	16.6	392	4.4	196	2.0	656	7.5
Ark. F.	3,613	25.4	79	.5	179	1.2	34	.2
Col. D.	853	2.6	512	1.6	2,184	6.6	564	1.7
Total,	2,065,499	21.4	72,397	.75	349,247	3.5	53,655	.55
1	2	3	4	5	6	7	8	9

Remarks. From this table it appears that 2,065,499 persons in the United States, or more than one fifth of the whole population, are engaged in agriculture. This number includes only those who are thus engaged by actual occupation, children, and females generally being excluded. It embraces, therefore, about two thirds of all the males over ten years of age.—The slave-holding states are most agricultural, the proportion being usually from one quarter to one third of the whole population, while in the other states it generally falls below 20 per cent. or one fifth.

Massachusetts has much the largest number engaged in commerce; but Michigan territory has the largest proportion. This uncommon proportion in Michigan is owing to the number of persons in that territory engaged in the fur trade. Louisiana has also an uncommon proportion; which is to be ascribed

to the great number of merchants in the city of New-Orleans, where the commerce of a large portion of the western country is transacted.

The sixth column includes not merely manufacturers, in the common sense of the term, but mechanics also, and artificers of every kind, whose labor is preeminently of the hand, and not upon the field.—Rhode Island has a greater proportion of population engaged in manufactures than any other state, and next in order are Massachusetts and Connecticut. Pennsylvania and New-Jersey also rank very high as manufacturing states. The District of Columbia shows a very large proportion of manufacturers, because it is composed almost wholly of cities. For the same reason it has scarcely any persons engaged in agriculture.

The general result is, that only 421,644 persons, or 3.80 per cent. of the population, are engaged in commerce and manufactures; that is, those engaged in agriculture are nearly five times as numerous as the merchants, manufacturers and mechanics taken together. This result is very different from that of the census of England in 1811. That kingdom contained 10,488,000 inhabitants, of whom 1,789,531, or 17 per cent. were employed in trade, manufactures and handicraft, and only 1,524,227, or 14.5 per cent. in agriculture.

Questions. 1. How large a proportion of the population of the United States is engaged in agriculture? 2. How large a proportion in commerce and manufactures? 3. Which states are most agricultural? 4. Which state has the smallest proportion of inhabitants engaged in agriculture? Which next? Which next? 5. Which state has the largest number of persons engaged in commerce? Which has the largest proportion? Which next? 6. Which state has the largest proportion of population engaged in manufactures? Which next? Which next? 7. Which state has the greatest number of foreigners not naturalized? Which next? 8. Which class of men are most numerous in Great Britain, those employed in agriculture, or those employed in trade, manufactures and handicraft? 9. Which are most numerous in this country? 10. How much more numerous are they?

TABLE XII. Showing the population of the six largest cities in the United States in 1820; and distinguishing the number of whites, slaves and free blacks, together with the males and females in each class.

Cities.	Whites.		Slaves.		Free blacks.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	
Boston,	20,114	21,450	None	None	759	931	43,298
New York,*	55,312	57,508	177	341	4,194	6,174	123,706
Philadelphia,*	25,855	29,232	None	3	3,156	4,423	63,802
Baltimore,	23,922	24,153	1,778	2,188	4,363	5,962	62,733
Charleston,	5,323	5,328	5,695	6,957	623	852	24,780
New Orleans,	8,266	5,318	2,709	4,646	2,422	3,805	27,176

TABLE XIII. Showing the proportion of the sexes in each of the six principal cities in the United States.

Cities.	Number of Females to every hundred males.			
	Whites.	Slaves.	Free blacks.	Total.
Boston,	106.70	None	122.66	107.00
New York,*	104.00	194.00	147.21	107.42
Philadelphia,*	113.30	None	140.00	116.06
Baltimore,	101.00	123.00	137.00	107.67
Charleston,	100.00	122.00	136.75	113.25
New Orleans,	64.38	171.00	157.00	103.52

* New York includes the city and county; Philadelphia, merely the city.

Remarks on Tables XII and XIII. From these tables it appears that in all our great cities the females are more numerous than the males. In the city of New-Orleans, indeed, the white males are much more numerous than the white females, but the deficiency is more than compensated by the excess of females among the slaves and free blacks. This uniform excess of females is perhaps to be attributed to the fact that many of the males are engaged in occupations in which there is unusual risk of life; many of them also are sailors, who are absent at the time of taking the census, and being without a fixed place of residence are omitted. In the city of Charleston other causes seem to have operated, because the excess of females is there, principally among the slaves; and this suggests the thought, that in the other cities the difference may be ascribed in part to an unusual demand for female domestic servants. But however we may account for it, the excess is very great. The average of all the cities gives nearly 109 females to 100 males, while the average of the whole United States, as appears from Table V. gives but 97 females to 100 males, making the females in our cities about 12 per cent. more numerous than in the country at large.

TABLE XIV. Showing the ages of the free white persons in each of the six principal cities of the United States, in 1820.

Cities.	Free White Males.					Free White Females.				
	Under ten.	10 to 16.	16 to 26.	26 to 45.	45 and upwards.	Under ten.	10 to 16.	16 to 26.	26 to 45.	45 and upwards.
Boston,	5,289	2,416	3,564	7,345	1,500	5,399	2,965	4,544	5,973	2,569
N. York,	15,898	7,066	11,017	14,872	6,459	15,983	8,335	13,120	13,701	6,369
Philadel.	7,247	3,305	5,921	6,332	2,980	7,155	4,160	7,215	7,065	3,637
Baltimore,	6,991	3,107	5,147	6,097	2,580	6,827	3,530	5,617	5,520	2,639
Charleston	1,408	649	1,147	1,305	814	1,359	825	1,113	1,192	841
N. Orleans,	1,477	495	1,784	3,565	945	1,500	885	1,327	1,016	590

TABLE XV. Showing what proportions of the free white persons in each of the six principal cities of the United States are under ten years of age, between 10 and 16, &c. distinguishing the males from the females.

Cities.	Free White Males.					Free White Females.				
	Under ten.	10 to 16.	16 to 26.	26 to 45.	45 and upwards.	Under ten.	10 to 16.	16 to 26.	26 to 45.	45 and upwards.
Boston,	12.74	5.82	8.58	17.70	3.61	13.00	7.14	10.95	14.40	6.19
N. York,	14.09	6.26	9.76	13.18	5.72	14.16	7.39	11.63	12.14	5.64
Philadel.	13.17	6.00	10.76	11.51	5.42	13.00	7.56	13.12	12.84	6.61
Baltimore,	14.56	6.47	10.72	12.70	5.37	14.22	7.35	11.70	11.50	5.49
Charleston	13.28	6.12	10.82	12.31	7.68	12.82	7.78	10.50	11.24	7.93
N. Orleans,	10.86	3.64	13.12	26.21	6.95	11.03	6.50	9.76	7.47	4.34
1	2	3	4	5	6	7	8	9	10	11

Remarks on Tables XIV and XV. From columns 9 and 10 it appears that the proportion of females between 16 and 45 is very large, being on an average, about 24 per cent. of the population, while in the country at large according to Table VI. it is only 19.30 per cent. At the same time the proportion of children under 10 years of age is very small, being on an average less than 28 per cent, while the average of the whole United States gives 33.29 per cent. From this it appears that the causes which operate to retard the increase of population exist to a much greater extent in our cities than elsewhere. If the number of children under 10 years of age is a fair criterion of the number of married females between 16 and 45, then, among the same number of women, there are twice as many married in the new states as in our large cities.

It is a singular fact that in every one of the cities mentioned in the table, the females under 16 years of age are more numerous

than the males, while in every state in the Union the fact is the reverse, and in the new states especially, the excess of *males* among the children is very great. From Table VII. it appears that in the newly settled states of Alabama, Mississippi, Indiana, Illinois and Missouri, taken collectively, there are, among the children under ten years of age, 76,067 boys and 70,038 girls; that is, for every 100 boys there are only 92 girls; while in the old states of New-Hampshire, Massachusetts, Rhode-Island, Connecticut and the District of Columbia there are 158,113 boys and 153,384 girls, that is, for every 100 boys there are 97 girls; and from Table XIV. it appears that in our six largest cities, taken collectively, there are, under ten years of age, 38,310 boys and 38,223 girls; that is, for every 100 boys there are nearly 100 girls. This seems to indicate, that the state of society which is most favorable to the increase of population, is peculiarly favorable to the increase of *males*; or perhaps, to be more particular, that the proportion of males among the offspring of early marriages is unusually great. If this is so, then the excess of females in the New-England states is not to be attributed wholly to the emigration of the males, and the very great excess of females in England is not wholly owing to the number of men who have perished in her wars.

COMMERCE.

TABLE I. Showing the estimated value of the domestic and foreign produce, exported from the United States to foreign countries during each year from 1790 to 1820.

Years.	Domestic Produce.	Foreign Produce.	Total.
For the year ending Sept. 30,			
1790			20,205,165
1791			19,012,041
1792			20,753,098
1793			26,109,572
1794			33,026,233
1795			47,989,472
1796	40,764,097	26,300,000	67,064,097
1797	29,850,206	27,000,000	56,850,206
1798	28,527,097	33,000,000	61,527,097
1799	33,142,522	45,523,000	78,665,522
1800	31,840,903	39,130,877	70,971,780
1801	47,473,204	46,642,721	94,115,925
1802	36,708,189	35,774,971	72,483,160
1803	42,205,061	13,594,072	55,800,033
1804	41,467,477	36,231,597	77,699,074
1805	42,387,002	53,179,019	95,566,021
1806	41,253,727	60,283,236	101,536,963
1807	48,699,592	59,643,558	108,343,150
1808	9,433,546	12,997,414	22,430,960
1809	31,405,702	20,797,531	52,203,283
1810	42,366,675	24,391,295	66,757,970
1811	45,294,043	16,022,790	61,316,833
1812	30,032,109	8,495,127	38,527,236
1813	25,008,152	2,847,845	27,855,997
1814	6,782,272	145,169	6,927,441
1815	45,974,403	6,583,350	52,557,753
1816	64,781,896	17,138,556	81,920,452
1817	68,313,500	19,358,069	87,671,569
1818	73,854,437	19,426,696	93,281,133
1819	50,976,838	19,165,683	70,142,521
1820	51,683,640	18,008,029	69,691,669

Remarks. The domestic produce is the produce of our own agriculture, forests, manufactures and fisheries. The foreign produce is the produce of the agriculture and manufactures of foreign countries. During the long wars in Europe which followed the French revolution, and lasted, with scarcely an interruption, till the general peace in 1815, the maritime superiority of Great Britain prevented the continental powers from maintaining a direct intercourse with their colonial possessions and other foreign countries. In this state of things, the United States, being the principal neutral power, enjoyed the benefits of the carrying trade between the different European countries and other parts of the world. To satisfy the laws of war and the commercial regulations which were made in reference to this subject, the produce was first brought from the foreign countries to the United States and

landed; after which it was re-exported. From the above table it appears that the carrying trade was very extensive between 1796 and 1807, the value of the foreign produce exported during that period being equal to that of the domestic produce, and in 1806 and 1807, when it had arrived at its maximum, greatly exceeding it. From 1807 to 1811 this trade, with all our export trade, was almost ruined by the embargo and non-intercourse acts of our own government; and during the war with Great Britain in 1812 '13 and '14, it was still farther reduced, especially during the last year of the war, when it was nearly annihilated. Since the return of peace the nations of Europe have become, to a great extent, their own carriers, and the export of foreign produce has consequently been very much diminished, but the value of the domestic produce exported has been greater than at any previous period. The total value of the exports, however, has never been so great as in 1805 '6 and '7.

Questions. 1. In which three years was the value of foreign produce exported from the United States the greatest? 2. In which five years was the value of domestic produce the greatest? 3. In which year was the value of the total produce exported, the greatest? 4. In which was it the smallest? 5. Why was it so small in 1814? 6. Why was it so small in 1808?

Exports and Shipping of each state.

TABLE II. Showing the value of the produce exported from each of the United States for the year 1820, distinguishing the domestic from the foreign produce; also the amount of shipping belonging to each state in 1815.

1	2	3	4	5	6	7	8	9
States.	Domestic Produce.	Proportion.	Foreign Produce.	Proportion.	Total Produce.	Proportion.	Shipping.	Proportion.
	Dollars.	per c.	Dollars.	per c.	Dollars.	per c.	Tons.	per c.
Maine,	1,082,568	2.09	25,463	.14	1,608,031	1.59	*	
N. H.	223,082	.43	17,718	.10	240,800	.34	29,744	2.3
Vermont	395,869	.76			395,869	.56		
Mass.	3,661,435	7.47	7,147,487	39.46	11,008,922	15.79	454,249	33.5
R. I.	569,902	1.10	502,860	2.78	1,072,762	1.54	38,196	2.9
Conn.	415,631	.80	6,101	.03	421,931	.65	60,091	4.4
N. Y.	8,250,675	15.96	4,912,569	27.29	13,163,244	18.89	287,500	21.0
N. J.	20,531	.04			20,531	.03	31,200	2.3
Penn.	2,948,879	5.70	2,794,670	15.52	5,743,549	8.24	99,558	7.7
Dela.	89,948	.17			89,498	.13	9,590	.7
Md.	4,681,593	9.58	1,927,766	10.70	6,609,364	9.48	153,203	11.2
Col. Dis.	1,156,468	2.24	48,447	.26	1,204,915	1.73	21,753	1.6
Virginia,	4,549,137	8.60	3,820	.05	4,557,957	6.54	71,496	5.2
N. C.	807,944	1.56	375	.01	808,319	1.16	41,011	3.0
S. C.	8,690,539	16.81	192,401	1.06	8,882,940	12.74	37,168	2.8
Georgia,	6,525,013	12.62	69,610	.39	6,594,623	9.46	15,288	1.1
Ohio,	2,218	.01			2,218	.01	419	
Lou.	7,242,415	14.01	353,742	*1.90	7,596,157	10.90	17,203	1.3
Missi.	96,636	.18			96,636	.14	145	
Mich. T.	73,408	.14			73,408	.10	159	
U. S.	51,683,640	100.00	18,008,029	100.00	69,691,669	100.00	1,368,127	100

*Included in Massachusetts.

Remarks. It must not be supposed that the domestic produce exported from any state is exclusively the produce or manufacture of the state from which it is exported. Louisiana has a large amount of exports, because it includes the produce of all the western states, which is floated down the Mississippi, and exported from New-Orleans. New-Jersey has a very small amount, because almost all her produce is exported from New-York and Philadelphia. In some years, more than half the domestic produce exported from Massachusetts has consisted of cotton, rice, tobacco, tar, flour, and other articles which had previously been brought coastwise from the southern and middle states. A very considerable proportion of the exports of New-York and Pennsylvania have also usually been the produce of other states. The productions of North Carolina are exported principally from the ports of Virginia and South Carolina.—The foreign produce is exported principally from the ports of Boston, New-York, Philadelphia and Baltimore.

From the ninth column it appears that New-England and New-York own nearly two thirds of all the shipping of the United States. The states south of the Potomac own only one eighth part. Our staple articles of export are principally the growth of the southern states ; but this produce is carried to foreign countries almost entirely in ships owned by northern merchants, and navigated by northern seamen. Hence, a natural foundation is established for the Union of the states.

Questions. 1. Which state was the first in amount of domestic exports in 1820 ? Which, next ? Which, next ? 2. What occasions the large amount from Louisiana ? 3. What occasions the small amount from New-Jersey ? 4. What occasions the small amount from North Carolina ? 5. Which state owned most shipping in 1815 ? Which, next ? Which, next ? 6. Which state exported the greatest quantity of foreign produce in 1820 ? Which, next ? Which, next ? Which, next ? 7. How large a proportion of the shipping of the United States belonged to Massachusetts in 1815 ? 8. How large a proportion was owned by the states south of the Potomac ?

List of the Articles Exported.

TABLE III. Showing the principal articles of domestic produce exported from the United States in 1817, arranged according to their value.

Articles exported.	Value.	Proportion of the whole. per. cent.
1. Cotton,	\$ 22,626,000	53.12
2. Wheat, flour and biscuit,	18,432,000	26.98
3. Tobacco,	9,239,000	13.61
4. Lumber, { viz. boards, staves, shingles, hoops, hewn timber, masts and spars, }	3,186,000	4.68
5. Rice,	2,579,000	3.48
6. Pot and pearl ashes,	1,987,000	2.88
7. Indian corn, and meal,	1,329,000	1.94
8. Dried and pickled fish,	1,328,000	1.94
9. Beef, tallow, hides and live cattle.	845,000	1.24
10. Skins and furs,	688,000	1.00
11. Rye and meal,	627,000	.92
12. Pork, bacon, lard and live hogs,	537,000	.78
13. Horses and mules,	432,000	.63
14. Soap and tallow candles,	358,000	.52
15. Gunpowder,	357,000	.52
16. Tar, pitch, rosin and turpentine,	345,000	.50
17. { Whale oil, whale bone and spermaceti candles, }	343,000	.50
18. Flax-seed,	278,000	.40
19. Butter and cheese,	213,000	.31

Remarks. The cotton was raised almost entirely in the states south of Virginia and Kentucky. The wheat and flour were raised principally in the middle and western states, and the tobacco in Maryland, Virginia and North Carolina. The lumber was cut chiefly in the forests of Maine, New Hampshire, and the low country of the Carolinas and Georgia. The rice grew undoubtedly in the swamps of the Carolinas, Georgia and Louisiana. The pot and pearl ashes came from New England and New York, and the Indian corn from every part of the Union. The dried fish are cod fish; the pickled fish are herrings, shad, salmon and mackerel. Almost all of them were caught by the fishermen of Massachusetts. The beef, tallow, hides and cattle were raised principally in the pastures of New England. The skins and furs were purchased from the Indian hunters. The rye, pork, horses, mules, soap and candles came chiefly from New England, but partly from the middle and western states. The tar, pitch, rosin and turpentine were obtained from the Carolina pines. The whale oil, whale bone and spermaceti candles were the fruits of the enterprise of the Nantucket and New Bedford whale men.

Questions. 1. What is the principal article of export from the United States? What portion of the whole is cotton? 2. What is the second article of export, in value? How large a portion of the whole is wheat and flour? 3. Mention the seven articles next in value to wheat in their order. 4. Where is the cotton raised? 5. Where is the wheat raised? the tobacco? the lumber? the rice? 6. Who caught the fish? 7. Where were the cattle raised? &c.

Increase and decrease of Exports.

TABLE IV. Showing the increase and decrease in the quantity of the staple productions of the United States exported at different periods.

YEAR.	COTTON.	FLOUR.	TOBACCO.	RICE.
	<i>Pounds.</i>	<i>Barrels.</i>	<i>Hhds.</i>	<i>Tierces.</i>
1790	100,000	724,623	118,460	80,845
1795	1,300,000	887,369	61,050	138,526
1800	17,789,803	633,052	73,630	112,056
1804	35,634,175	810,008	83,342	78,385
1817	85,649,328	1,479,198	62,365	79,296

Remarks. It is worthy of remark in this table, that the amount of cotton exported has increased regularly from 100,000 pounds to more than 85,000,000. It is now the staple production of the United States, and constitutes one third of the whole value of our exports. This astonishing revolution in our agriculture and commerce is to be ascribed to the invention, by Mr. Whitney, of a machine for cleansing upland cotton from its seeds. Before the invention of that machine, it was so difficult to cleanse the cotton, that the cultivation of it was not profitable. But now it is cultivated in all the country south of Virginia and Kentucky, where the land will admit of it. The fourth and fifth columns show that the amount of tobacco and rice has decreased. This is owing to the increase in the amount of cotton; for, when the cultivation of cotton became profitable, the planters neglected tobacco, rice, indigo, and every other crop, and employed their slaves almost exclusively on their cotton plantations.

Questions. 1. Which of the exports of the United States has increased most since 1790, cotton, flour, tobacco, or rice? 2. Which next? 3. Which has decreased? 4. What occasioned the increase in the cultivation of cotton? 5. What occasioned the decrease in the cultivation of tobacco and rice?

Destination of the Exports.

TABLE V. Showing the annual value of the produce exported to each foreign country, calculated on the average of ten years, ending September 30, 1812.

(From Seybert's Statistical Annals.)

Foreign countries.	Domestic Produce.		Foreign Produce.		Total Produce.	
	Annual value.	Pro-portion.	Annual value.	Pro-portion.	Annual value.	Pro-portion.
	<i>Dollars.</i>	<i>per c.</i>	<i>Dollars.</i>	<i>per c.</i>	<i>Dollars.</i>	<i>per c.</i>
Russia,	307,717	0.82	1,019,303	3.33	1,327,020	1.85
Prussia,	96,030	0.25	178,948	0.58	274,979	0.44
Sweden and dominions,	1,400,863	3.74	1,015,741	3.32	2,416,605	3.55
Denmark and do.	1,832,827	4.89	1,961,150	6.42	3,793,977	5.56
Holland and do.	1,790,967	4.78	6,803,503	22.22	8,594,471	12.63
Great Britain & do.	16,853,102	44.99	1,812,674	5.92	18,665,777	27.44
Germany,	736,552	1.96	1,695,506	5.54	2,432,059	3.57
France and dominions,	3,118,217	8.32	5,874,694	19.18	8,992,912	13.19
Spain and do.	5,692,220	15.19	5,598,596	18.28	11,190,817	16.45
Portugal and do.	4,154,999	11.09	696,284	2.27	4,851,283	7.13
Italy,	152,968	0.40	1,881,681	6.15	2,034,649	2.99
Trieste & Austrian ports,	14,380	0.03	216,504	0.70	230,885	0.33
Turkey, Levant, & Egypt,	15,431	0.04	260,701	0.84	276,132	0.40
Barbary States,	93,287	0.24	179,743	0.58	273,031	0.40
Cape of Good Hope,	50,198	0.13	70,286	0.22	120,484	0.17
China,	193,430	0.51	139,634	0.45	333,065	0.48
Asia generally,	6,976	0.01	14,991	0.04	11,968	0.02
East Indies generally,	128,135	0.34	351,189	1.14	479,324	0.70
West Indies do.	1,123,275	2.99	390,057	1.27	1,513,332	2.22
Europe do.	158,293	0.42	458,268	1.49	616,561	0.90
Africa do.	213,819	0.57	227,395	0.74	441,214	0.65
South Sea,	4,366	0.01	20,162	0.06	24,529	0.03
Northwest coast,	19,011	0.05	147,771	0.48	166,782	0.24
1	2	3	4	5	6	7

Remarks. The amount of exports to the various countries is very different in different years; but the British dominions always receive the largest portion of our domestic produce, particularly cotton. The Spanish, Portuguese and French dominions, have usually been next to the British.

The period to which the table refers was a period of war, during which the carrying trade of the continental powers fell into our hands. From the fourth column it appears that the nations for which we carried most were the Dutch, French, and Spaniards. Since the return of peace in 1815, the quantity of the foreign produce exported from this country, as appears from Table I. has been very small, compared with its amount from 1802 to 1812, and in 1816 and 1817 the largest portion of it went to

the South American states. From the seventh column it appears that more than one fourth part of the whole produce exported during the period mentioned in the table, went to the British dominions. In 1816 and 1817 the proportion was about one half.

Questions. 1. Which foreign nation received the largest amount of our domestic produce between 1802 and 1812? 2. Which three nations stood next to the British? 3. Which nation received the greatest amount of foreign produce from the United States? 4. Which two nations stood next to the Dutch? 5. How large a portion of our exports between 1802 and 1812, was destined to the British dominions?

A List of the principal Articles Imported.

TABLE VI. Showing the annual value of the several species of merchandize imported into the United States, the value of what was exported with allowance of drawback, and the value of that portion on which duties were actually collected, together with the net duty paid on each article, calculated on the average of the three years ending September 30, 1804.

Articles.	Value.			Net Duty.
	Imported.	Exported with allowance of drawback.	On which duties were actually collected.	
Merchandise paying ad valorem duties,	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>
Coffee,	39,489,590	4,411,330	35,078,258	4,617,542
Sugar,	8,372,712	6,837,690	1,535,022	393,232
Rum,	7,794,254	3,821,965	3,972,289	1,337,605
Wines,	3,881,089	125,568	3,755,521	1,800,214
Teas,	2,962,039	810,348	2,151,691	726,068
Brandy,	2,360,507	963,028	1,397,479	475,249
Molasses,	2,077,601	313,918	1,763,683	547,975
Hemp,	1,930,592	8,112	1,922,480	320,460
Cotton,	919,443		919,443	102,160
Salt,	804,125	748,831	55,294	9,780
Geneva,	771,996	6,283	765,713	561,953
Pepper,	675,430	91,083	584,347	279,700
Nails and Spikes,	633,041	512,383	120,658	75,595
Indigo,	479,041	34,982	444,059	70,401
Cocoa,	436,941	279,271	157,670	27,908
Lead & manufact's of lead,	310,773	132,289	178,484	24,166
Steel,	227,002	12,750	214,252	23,642
Boots and Shoes,	147,957	4,145	143,812	8,595
Cheese,	101,300	11,331	89,969	13,610
Beer Ale and Porter,	77,150	40,767	36,383	10,586
Pimento,	76,020	2,119	73,902	13,448
Coal,	71,927	35,227	36,700	12,498
All other articles,	36,407	185	36,222	20,127
Total,	680,000	166,493	513,507	77,386
	75,316,937	19,370,099	55,946,838	11,551,100

Remarks. The goods paying duties ad valorem, (that is, a certain per cent. on the value of the article) constitute commonly more than one half of our imports. They consist principally of manufactured goods, particularly woollens and cottons. The coffee, sugar, rum, and other articles above enumerated, pay specific duties: that is, a certain sum on every pound or gallon of their weight or measure.

Of the goods paying duties ad valorem, more than three quarters came from the British dominions, and the rest chiefly from China, Germany, Russia, and France. From the table it appears, that nearly all these goods were consumed within the United States, only one tenth part being re-exported. The coffee came

entirely from the colonies of the European powers in America and the East Indies; particularly from the French West India possessions. Very little of the coffee was consumed in the United States, more than three quarters having been re-exported, as appears from the third column. The *sugar* came also from the East and West Indies, and about one half of it was re-exported. The *rum* was imported principally from the British and Danish West Indies, and was almost wholly consumed in the United States. The *wines* came chiefly from France, Spain, Portugal, Madeira and the Canary islands; the *teas* almost entirely from China; the *brandy* from France, Spain and Italy; the *molasses*, from the West Indies; and the *hemp* from Russia. The *cotton* came principally from the Spanish American colonies and was almost wholly re-exported. The *pepper* was from the Dutch East India possessions, and was also principally re-exported. The *nails* and *spikes*, *lead* and *manufactures of lead*, *boots* and *shoes*, *beer*, *ale* and *porter*, and the *coal* came chiefly from Great Britain. The *steel* and the *cheese* came almost wholly from Great Britain and the Netherlands. The *salt* came principally from Great Britain and her West India colonies, but Portugal, Spain, and the Cape Verd islands furnished also considerable quantities.

Questions. 1. What are the principal articles included in the merchandize paying ad valorem duties to the United States? 2. What are the seven principal articles imported into the United States, exclusive of the merchandize paying duties ad valorem? 3. Which imported article, exclusive of the merchandize paying duties ad valorem, yields the greatest amount of revenue to the United States? 4. Which next? 5. Which next? 6. From what parts of the world was the coffee, consumed in the United States between 1801 and 1804, imported? 7. From what parts, the sugar? the rum? &c.

Balance of Trade.

TABLE VII. Showing the amount of the export and import trade of the United States with each foreign nation, calculated on the average of the three years 1802, 1803 and 1804.

(From *Seybert's Statistical Annals*.)

	Exports.		Imports.		Balance.
	Annual value of the exports to	Pro-portion.	Annual value of imports from	Pro-portion.	
		per. c.		per. c.	
G. Britain & dependencies,	23,707,988	34.62	35,737,030	47.44	*12,029,042
Russia, do.	24,573	0.03	2,105,346	2.90	*2,080,773
Prussia, do.	552,220	0.08	127,834	0.16	424,386
Sweden, do.	410,900	0.59	587,513	0.78	*176,613
Denmark, do.	2,320,334	3.38	2,392,774	3.29	*72,450
Germany, do.	4,661,410	6.80	1,779,109	2.36	2,882,301
Holland & dependencies,	9,312,566	13.60	6,265,585	8.45	3,046,981
France, do.	11,832,513	17.28	12,356,390	16.46	*523,877
Spain, do.	7,496,507	10.95	6,196,940	8.36	1,299,567
Portugal, do.	2,321,035	3.39	1,052,358	1.39	1,268,677
Italy and Trieste,	2,014,156	2.94	669,896	0.88	1,344,260
China & other native } Asiatic ports, }	431,507	0.63	4,856,156	6.44	*4,424,649
All other countries,	3,385,389	4.94	713,418	0.94	2,671,971
Total,	68,471,098	100.00	74,840,349		*6,369,251

* Those marked with a star are balances against the United States; the rest are in favor.

Remarks. From the last column it appears that the balance of trade on the whole, during the period referred to in the table, was against the United States; particularly with Great Britain, China, and Russia. With these countries the balance is always against us. From Great Britain we receive vast quantities of woollen and cotton goods, and manufactures of iron, steel, brass, copper, glass, earthen ware, silk, linen, &c. and although, in return, we send a large amount of cotton, tobacco, lumber, pot and pearl ashes, and other produce, yet still the balance is always greatly in favor of Great Britain. From China we receive tea and silks, and she takes scarcely any thing in return but specie. From Russia we receive iron and hemp, and articles manufactured of those materials, while she has occasion for very little of our surplus produce. The trade with Germany, Holland, Spain and Italy was very favorable to the United States during the period referred to in the table, because the carrying trade of these countries was at that time in our hands.

Questions. 1. How large a proportion of the exports of the United States from 1802 to 1804 went to the British dominions? 2. How large a proportion of the imports came from the British dominions? 3. In whose favor is the balance of trade between Great Britain and the United States? 4. Is the balance of trade with China for or against the United States? 5. Is the balance of trade with all foreign nations, taken collectively, for or against the United States? 6. Why is the balance against us in the case of China? 7. Why is it against us in the case of Russia?

TABLE VIII. A statement of the American and Foreign tonnage entered into the United States from 1789 to the 31st of December 1820, showing the whole tonnage employed in the foreign trade.

Years.	American vessels.	Foreign vessels.	Total tonnage employed in the foreign trade.	Proportion of the foreign tonnage to the whole.
	Tons.	Tons.	Tons.	
1789	127,329	106,654	234,634	41.1 to 100
1790	354,767	251,058	606,137	41.4 to do.
1791	303,662	240,740	604,592	39.8 to do.
1792	414,679	244,278	658,957	37.0 to do.
1793	447,754	164,676	613,540	26.8 to do.
1794	525,649	84,521	611,717	13.8 to do.
1795	580,277	62,549	648,543	9.7 to do.
1796	675,046	49,960	728,120	6.9 to do.
1797	668,078	76,693	688,707	11.2 to do.
1798	522,045	88,568	611,617	14.5 to do.
1799	626,495	109,599	738,110	14.9 to do.
1800	682,871	122,403	808,507	15.1 to do.
1801	849,302	157,270	1,006,979	15.5 to do.
1802	788,805	145,519	942,138	15.4 to do.
1803	787,424	163,714	951,489	17.2 to do.
1804	821,962	122,141	944,166	12.9 to do.
1805	922,298	87,842	1,010,141	8.6 to do.
1806	1,044,005	90,984	1,135,504	8.0 to do.
1807	1,089,876	86,780	1,176,198	7.3 to do.
1808	525,130	47,674	593,137	8.0 to do.
1809	603,931	99,205	685,019	11.8 to do.
1810	906,434	80,316	987,030	8.1 to do.
1811	948,247	33,202	981,975	3.4 to do.
1812	667,999	47,098	715,374	6.6 to do.
1813	237,348	113,827	352,904	32.2 to do.
1814	59,626	48,301	108,094	44.7 to do.
1815	706,463	217,376	929,111	22.2 to do.
1816	877,031	259,017	1,150,056	22.5 to do.
1817	780,136	212,420	992,556	21.4 to do.
1818	755,101	161,413	916,514	17.6 to do.
1819	783,579	85,554	869,133	9.8 to do.
1820	801,253	79,204	880,457	8.10 to do.

Remarks. While we were subject to Great Britain, nearly one half of the shipping employed in our foreign trade was owned by British merchants; and even for several years after the adoption of our present constitution, more than one third part of it belonged to foreigners. With a view to increase our own shipping, Congress, in 1790, passed an act imposing a duty of 50 cents per ton on all foreign vessels entering the ports of the United States, while American vessels paid only six cents per ton. An act was also passed increasing the duties on all goods imported in foreign vessels, 10 per cent. beyond what was paid on the same articles when imported in American ships. These duties are usually called "*the discriminating duties*," and their effect on American shipping was exceedingly beneficial. To counteract the effect of

these laws, the British parliament, in 1797, imposed duties on American goods imported into Great Britain in American vessels, beyond what was paid on the same articles imported in British ships. The Americans were also made subject to a duty on exports from Great Britain, double that which was paid by European nations.—In 1815 a convention was concluded between the United States and Great Britain, by which the discriminating duties of both nations were abolished so far as they related to vessels engaged in the direct trade between the United States and the British dominions in Europe. The trade, however, between the United States and the British possessions in the West Indies and on the continent of North America, was not affected by the convention. This trade was carried on principally by British vessels; the vessels of the United States being in a great measure excluded from it, by the rigorous enforcement of the colonial system of Great Britain. To counteract the injurious operations of this system on our shipping, a law was passed in 1818 closing the ports of the United States against all British vessels coming from any port in the colonies which is closed against the vessels of the United States.

The effect of the various regulations above recited, and of some other causes, may be traced in the table. The discriminating duties imposed in 1790, in the course of a few years, almost excluded foreign vessels from our ports. Within six years after those duties were levied, the American tonnage employed in our foreign trade nearly doubled, while that of foreigners, which originally was more than 40 per cent. of the whole, was reduced to less than one sixteenth part. Notwithstanding the acts of the British parliament in 1797, the American tonnage increased with unprecedented rapidity during the continuance of the wars in Europe. Our vessels, not being liable to pay a war insurance, could carry goods cheaper than those of the belligerent nations, and were sought after for the transportation of every species of merchandize. In 1808 and the three subsequent years, the tonnage employed in the foreign trade was much diminished by the embargo and non-intercourse acts of our own government; and in 1812, '13 and '14, the war with Great Britain reduced it still farther, especially that part of it which belonged to our own citizens. After the establishment of general peace in Europe, and the conclusion of the convention with Great Britain in 1815, the amount of foreign shipping greatly increased, till the passage of the law in 1818 which cut off that portion of it employed in the trade between the United States and the British possessions in the West Indies and on the continent of North America.

Questions. 1. How large a proportion of the tonnage employed in the foreign trade of the United States in 1790, belonged to foreigners? 2. How large a proportion, in 1796? 3. How large a proportion, in 1814? 4. What occasioned the great increase of American shipping employed in foreign trade between 1790 and 1796? 5. What occasioned the diminution in 1808 and the subsequent years?

TABLE IX. Showing the tonnage of the United States for each year, from 1789 to 1819, distinguishing the amount employed in the foreign trade, coasting trade and fisheries.

Years.	Registered Tonnage employed in the Foreign Trade.	Enrolled and licensed tonnage in the coasting trade.	Enrolled in the Whale Fishery.	Enrolled and licensed in the Cod fishery.	Total Tonnage.
1789	123,893	68,607		3,062†	201,562
1790	346,254	103,775		28,348†	478,377
1791	363,110	106,494		32,542†	502,146
1792	411,438	120,957		32,062†	564,437
1793	367,734	122,070		40,162†	491,780
1794	438,862	184,204	4,139	28,670	628,816
1795	529,470	184,396	3,162	30,933	747,963
1796	576,733	217,839	2,363	34,962	831,900
1797	597,777	237,402	1,103	40,628	876,012
1798	603,376	251,442	763	42,745	898,326
1799	669,197	246,640	592	29,978	946,408
1800	669,921	272,491	651	29,426	972,492
1801	718,549	274,551	736	39,380	1,033,218
1802	560,380	289,622	580	41,520	892,101
1803	597,157	299,060	1,143	51,812	949,147
1804	672,530	317,536	323	52,013	1,042,403
1805	749,341	332,662	898	57,465	1,140,368
1806	808,284	340,539	728	59,182	1,209,735
1807	848,306	349,027	907	69,305	1,268,548
1808	769,053	420,819	724	51,997	1,242,595
1809	910,059	405,161	573	34,495	1,350,281
1810	984,269	405,346	339	34,827	1,424,783
1811	768,852	420,361	54	43,232	1,232,502
1812	760,624	477,970	941	30,458	1,269,997
1813	674,853	471,107	788	20,877	1,166,628
1814	674,632	466,156	561	17,855	1,159,208
1815	854,294	475,664	1,229	36,937	1,368,127
1816	800,759	522,164	1,168	48,125	1,372,218
1817	809,724	525,029		65,157†	1,399,911
1818	606,988	549,374		69,722†	1,165,184
1819	612,930	571,058		76,762†	1,260,751

† These numbers include the enrolled tonnage employed in the whale fishery.

Remarks. The tonnage of the United States increased with astonishing rapidity from 1790 to 1810, when it arrived at its maximum, and amounted to 1,424,783 tons; an amount far greater than that of any other nation in the world except Great Britain; and greater than that of Great Britain and Ireland united, in 1788. The tonnage of all the nations of Europe in 1676, according to Sir William Petty, was only 2,000,000 tons, or about one third more than that of the United States 20 years after the formation of our present government. The most rapid increase was in the tonnage employed in the foreign trade. The reasons for

this have been given in the Remarks on Table VIII. The tonnage employed in the coasting trade has been subject to none of the fluctuations of that employed in the foreign trade, but has regularly as well as rapidly advanced from 103,775 tons in 1790, to 571,058 tons in 1819, having increased more than five fold in less than 30 years.

The tonnage employed in the fisheries has not progressed with the same rapidity. Before the revolutionary war the state of Massachusetts alone employed 24,000 tons of shipping and about 4,000 seamen in the whale fishery; and 28,000 tons of shipping and 4,000 seamen in the cod fishery. These fisheries were destroyed during the revolutionary war, and for many years afterwards did not regain their original importance. To encourage them, Congress, in 1792, granted a bounty to the owners and seamen of the vessels employed in the bank or cod fisheries, and in 1814 this bounty was considerably increased. During the late war with Great Britain our fishermen sustained heavy losses, but since the return of peace they have resumed their occupations, and the fisheries are now in a more flourishing state than at any period since the declaration of our independence. In 1818 there were in the districts of New-Bedford and Nantucket, 72 vessels engaged in the whale fishery, whose aggregate tonnage was 17,158 tons; and this number has since very considerably increased. The tonnage employed in the fisheries is almost exclusively owned in Massachusetts. No state south of New-York ever owned a single vessel employed in the whale fishery.

Questions. 1. In what year was the tonnage of the United States the greatest? 2. What was its amount in 1810? 3. How does this compare with the amount belonging to other nations? 4. Which species of our tonnage has increased most regularly? 5. What was the amount of the tonnage employed in the coasting trade in 1790? 6. What was its amount in 1819? 7. Which of the United States is most interested in the fisheries? 8. What amount of tonnage was employed by Massachusetts in the fisheries before the revolutionary war? 9. What amount of tonnage was employed in the fisheries by all the United States in 1819? 10. How did the amount in 1819 compare with previous years?

REVENUE AND EXPENDITURE.

TABLE I. Showing the receipts at the Treasury of the United States, for each year, from the commencement of the present government to 1815.

1	2	3	4	5	6
Years.	Customs. Dollars.	Internal* Revenue. Dollars.	Loans and Treasury notes. Dollars.	Miscella- neous receipts. Dollars.	Aggregate amount of receipts. Dollars.
1791	4,399,472	311	361,391	10,167	4,771,342
1792	3,433,070	209,060	5,102,498	17,823	8,772,458
1793	4,255,306	349,396	1,797,272	48,230	6,450,195
1794	4,801,065	304,138	4,007,950	326,701	9,439,855
1795	5,588,461	360,755	3,396,424	170,117	9,515,758
1796	6,567,787	554,415	320,000	1,297,926	8,740,329
1797	7,548,649	725,348	70,000	413,783	8,758,780
1798	7,106,061	696,843	200,000	176,265	8,179,170
1799	6,610,449	837,848	5,000,000	98,515	12,546,813
1800	9,080,932	1,637,314	1,565,229	130,502	12,413,978
1801	10,750,778	1,832,553		361,123	12,945,455
1802	12,438,235	1,056,306		1,501,251	14,995,793
1803	10,479,417	473,401		111,278	11,064,097
1804	11,098,565	620,647		107,094	11,826,307
1805	12,936,487	608,245		15,960	13,560,693
1806	14,667,698	884,628		7,604	15,559,931
1807	15,845,521	523,205		84,112	16,398,019
1808	16,363,550	680,169		11,970	17,060,661
1809	7,296,020	360,690		117,160	7,773,473
1810	8,583,309	696,888	2,750,000	179,602	12,134,214
1811	13,313,222	1,066,173		208,052	14,422,634
1812	8,958,777	809,128	12,837,900	97,737	22,639,032
1813	13,224,623	887,351	26,184,135	253,006	40,524,844
1814	5,998,772	5,072,079	23,327,286	429,668	34,878,432
1815	7,282,942	8,269,541	35,264,320	6,973	51,283,946

* The numbers in this column include not only the duties on spirits distilled, carriages, sales at auction, licences granted to retailers, sugar refined, stamps, &c. which are commonly termed internal duties; but also the proceeds of the direct tax, postage of letters, sales of public lands, and fees on letters patent, fines, penalties and forfeitures.

TABLE II. Showing the aggregate receipts of the Treasury from the 4th of March, 1789, to the 31st of March, 1815.

Receipts.	Total amount.	Annual average.	Proportion of the whole.
From the customs,	222,530,374	8,558,860	90.05
- internal revenue,	9,016,342	346,782	3.65
- direct taxes,	4,476,826	172,185	1.81
- postage of letters,	747,388	28,745	.30
- sales of public lands,	8,658,369	333,014	3.50
- miscellaneous sources,	1,590,001	61,154	.64
	247,019,302	9,500,742	100.00
From loans,	107,138,184	4,120,699	
Total Receipts,	354,157,487	13,621,441	

Remarks on Tables I. and II. From the last column in Table I. it appears that the receipts were greatest in the years 1812, '13, '14 and '15. This was a period of war with Great Britain, when large sums were demanded for the support of our military and naval establishments. The real revenue, however, during this period, was very small, the principal source of the receipts being loans and treasury notes.

From Table II. it appears that more than nine tenths of the real revenue of the United States since the establishment of our present government, has been derived from the customs; that is, from the duties paid on tonnage and on foreign goods imported into the United States. The internal duties and direct taxes yield very little, being only resorted to in cases of emergency. During the administration of Mr. Adams, from 1797 to 1801, they were considerably productive, but soon after Mr. Jefferson came into office they were abolished, and the dependence was almost exclusively on the customs, until the late war destroyed our commerce, and reduced the income from that source to less than half its usual amount. Direct taxes and internal duties were then revived, and in 1815 more than half of our real revenue was derived from these sources. The postage of letters was never intended as a source of revenue. The income from the sale of public lands is very rapidly increasing. The number of acres sold during the year 1817 was more than 2,000,000, and the amount of the purchase money was between 4 and \$5,000,000.

After 1815, the revenue for several years was much greater than at any former period, owing to the immense quantities of foreign goods which were imported into the country. It continually decreased, however, till the year 1821, when it reached its lowest point of depression, and has since been gradually rising. It may now be estimated, in ordinary years, at about \$20,000,000. Soon after the termination of the war, the direct taxes and most of the internal duties were again abolished.

Questions. 1. In which three years were the receipts into the Treasury of the United States the greatest? 2. What were the principal sources of the revenue during these three years? 3. In which four years were the receipts from internal revenue the greatest? 4. What is the principal source of the revenue of the United States? 5. How large a portion of the revenue has usually been derived from the customs?

Year	Customs	Internal Revenue	Total
1797	\$1,000,000	\$1,000,000	\$2,000,000
1801	\$1,000,000	\$1,000,000	\$2,000,000
1805	\$1,000,000	\$1,000,000	\$2,000,000
1812	\$1,000,000	\$1,000,000	\$2,000,000
1813	\$1,000,000	\$1,000,000	\$2,000,000
1814	\$1,000,000	\$1,000,000	\$2,000,000
1815	\$1,000,000	\$1,000,000	\$2,000,000
1816	\$1,000,000	\$1,000,000	\$2,000,000
1817	\$1,000,000	\$1,000,000	\$2,000,000
1818	\$1,000,000	\$1,000,000	\$2,000,000
1819	\$1,000,000	\$1,000,000	\$2,000,000
1820	\$1,000,000	\$1,000,000	\$2,000,000
1821	\$1,000,000	\$1,000,000	\$2,000,000
1822	\$1,000,000	\$1,000,000	\$2,000,000
1823	\$1,000,000	\$1,000,000	\$2,000,000
1824	\$1,000,000	\$1,000,000	\$2,000,000
1825	\$1,000,000	\$1,000,000	\$2,000,000
1826	\$1,000,000	\$1,000,000	\$2,000,000
1827	\$1,000,000	\$1,000,000	\$2,000,000
1828	\$1,000,000	\$1,000,000	\$2,000,000
1829	\$1,000,000	\$1,000,000	\$2,000,000
1830	\$1,000,000	\$1,000,000	\$2,000,000
1831	\$1,000,000	\$1,000,000	\$2,000,000
1832	\$1,000,000	\$1,000,000	\$2,000,000
1833	\$1,000,000	\$1,000,000	\$2,000,000
1834	\$1,000,000	\$1,000,000	\$2,000,000
1835	\$1,000,000	\$1,000,000	\$2,000,000
1836	\$1,000,000	\$1,000,000	\$2,000,000
1837	\$1,000,000	\$1,000,000	\$2,000,000
1838	\$1,000,000	\$1,000,000	\$2,000,000
1839	\$1,000,000	\$1,000,000	\$2,000,000
1840	\$1,000,000	\$1,000,000	\$2,000,000
1841	\$1,000,000	\$1,000,000	\$2,000,000
1842	\$1,000,000	\$1,000,000	\$2,000,000
1843	\$1,000,000	\$1,000,000	\$2,000,000
1844	\$1,000,000	\$1,000,000	\$2,000,000
1845	\$1,000,000	\$1,000,000	\$2,000,000
1846	\$1,000,000	\$1,000,000	\$2,000,000
1847	\$1,000,000	\$1,000,000	\$2,000,000
1848	\$1,000,000	\$1,000,000	\$2,000,000
1849	\$1,000,000	\$1,000,000	\$2,000,000
1850	\$1,000,000	\$1,000,000	\$2,000,000
1851	\$1,000,000	\$1,000,000	\$2,000,000
1852	\$1,000,000	\$1,000,000	\$2,000,000
1853	\$1,000,000	\$1,000,000	\$2,000,000
1854	\$1,000,000	\$1,000,000	\$2,000,000
1855	\$1,000,000	\$1,000,000	\$2,000,000
1856	\$1,000,000	\$1,000,000	\$2,000,000
1857	\$1,000,000	\$1,000,000	\$2,000,000
1858	\$1,000,000	\$1,000,000	\$2,000,000
1859	\$1,000,000	\$1,000,000	\$2,000,000
1860	\$1,000,000	\$1,000,000	\$2,000,000
1861	\$1,000,000	\$1,000,000	\$2,000,000
1862	\$1,000,000	\$1,000,000	\$2,000,000
1863	\$1,000,000	\$1,000,000	\$2,000,000
1864	\$1,000,000	\$1,000,000	\$2,000,000
1865	\$1,000,000	\$1,000,000	\$2,000,000
1866	\$1,000,000	\$1,000,000	\$2,000,000
1867	\$1,000,000	\$1,000,000	\$2,000,000
1868	\$1,000,000	\$1,000,000	\$2,000,000
1869	\$1,000,000	\$1,000,000	\$2,000,000
1870	\$1,000,000	\$1,000,000	\$2,000,000
1871	\$1,000,000	\$1,000,000	\$2,000,000
1872	\$1,000,000	\$1,000,000	\$2,000,000
1873	\$1,000,000	\$1,000,000	\$2,000,000
1874	\$1,000,000	\$1,000,000	\$2,000,000
1875	\$1,000,000	\$1,000,000	\$2,000,000
1876	\$1,000,000	\$1,000,000	\$2,000,000
1877	\$1,000,000	\$1,000,000	\$2,000,000
1878	\$1,000,000	\$1,000,000	\$2,000,000
1879	\$1,000,000	\$1,000,000	\$2,000,000
1880	\$1,000,000	\$1,000,000	\$2,000,000
1881	\$1,000,000	\$1,000,000	\$2,000,000
1882	\$1,000,000	\$1,000,000	\$2,000,000
1883	\$1,000,000	\$1,000,000	\$2,000,000
1884	\$1,000,000	\$1,000,000	\$2,000,000
1885	\$1,000,000	\$1,000,000	\$2,000,000
1886	\$1,000,000	\$1,000,000	\$2,000,000
1887	\$1,000,000	\$1,000,000	\$2,000,000
1888	\$1,000,000	\$1,000,000	\$2,000,000
1889	\$1,000,000	\$1,000,000	\$2,000,000
1890	\$1,000,000	\$1,000,000	\$2,000,000
1891	\$1,000,000	\$1,000,000	\$2,000,000
1892	\$1,000,000	\$1,000,000	\$2,000,000
1893	\$1,000,000	\$1,000,000	\$2,000,000
1894	\$1,000,000	\$1,000,000	\$2,000,000
1895	\$1,000,000	\$1,000,000	\$2,000,000
1896	\$1,000,000	\$1,000,000	\$2,000,000
1897	\$1,000,000	\$1,000,000	\$2,000,000
1898	\$1,000,000	\$1,000,000	\$2,000,000
1899	\$1,000,000	\$1,000,000	\$2,000,000
1900	\$1,000,000	\$1,000,000	\$2,000,000

TABLE III. Showing the expenditure of the United States, during each year, from the commencement of the present government to 1815.

YEARS.	Military establishment.	Indian department.	Naval department.	*Foreign intercourse.	†Civil list.	Total.
1791	632,804	27,000	570	14,733	1,043,021	3,797,426
1792	1,100,702	13,648	53	78,766	572,905	8,962,920
1793	1,130,249	27,282		89,500	460,316	6,479,977
1794	2,639,097	13,042	61,403	146,403	640,395	9,041,593
1795	2,430,910	23,475	410,562	912,685	522,933	10,151,240
1796	1,260,263	113,563	274,764	184,659	698,458	3,367,776
1797	1,039,402	62,396	382,631	669,783	679,370	3,625,877
1798	2,009,522	16,470	1,381,347	457,428	758,454	5,583,618
1799	2,466,946	28,302	2,853,031	271,374	863,460	11,002,396
1800	2,560,878	31	3,448,716	395,267	1,006,455	11,952,534
1801	1,672,944	9,000	2,111,424	135,676	891,624	12,273,376
1802	1,221,143	52,000	915,561	550,925	997,443	13,270,487
1803	392,055		1,215,230	1,110,334	794,692	11,258,963
1804	938,323	53,000	1,169,832	1,186,652	1,084,446	12,615,113
1805	768,291	141,000	1,597,500	2,798,126	1,052,423	13,593,309
1806	1,383,555	75,000	1,649,631	1,760,421	1,211,590	15,021,196
1807	1,338,285	104,825	1,722,064	577,825	1,190,560	11,292,292
1808	3,041,434	72,975	1,884,067	304,932	1,200,868	16,762,702
1809	3,470,772	212,503	2,427,758	166,305	1,143,331	13,967,226
1810	2,389,923	82,025	1,654,244	81,366	1,103,521	13,309,994
1811	2,122,828	61,875	1,965,566	264,904	1,177,430	13,592,604
1812	12,022,790	72,945	3,953,365	347,702	1,426,786	22,379,121
1813	12,747,013	72,358	9,446,600	209,961	1,606,484	39,190,520
1814	20,507,906	10,294	7,311,290	177,179	2,120,960	39,547,915
1815	15,203,794	117,750	8,660,090	290,391	1,210,645	25,522,069

* Including Barbary powers.

† Including miscellaneous items.

TABLE IV. Showing the aggregate expenditures of the Treasury from the 4th of March, 1789, to the 31st of March, 1815.

Expenditures.	Total amount.	Annual average.	Proportion of the whole.
For pay and subsistence of the army,	38,270,562	3,395,021	25.04
— fortifications of posts and harbors,	4,374,805	168,324	1.24
— other military expenses,	4,938,611	189,948	1.40
— Indian department,	1,338,040	51,463	.38
— naval department,	47,813,303	1,839,165	13.56
— foreign intercourse,	10,678,015	410,693	3.03
— Barbary powers,	2,405,322	92,512	.68
— civil list,	14,940,695	574,642	4.24
— miscellaneous civil,	9,909,979	381,153	2.81
— public debt,	167,524,503	6,443,253	47.52
— account of revolutionary govern ^{mt} ,	316,268	12,164	.01
Total expenditure,	352,560,193	13,560,002	100.00

Remarks on Tables III. and IV. The expenditures on account of the *military establishment* include the sums paid for the wages, subsistence, clothing and equipments of the army; the bounties paid to soldiers; the payment for the services of militia and volunteers; expenses on account of the military academy, arsenals, magazines and hospitals, and for the fortification of the posts and harbors of the United States. The expenses of the *Indian department* include the sums paid in consequence of treaties concluded with the Indians, and on account of the trading houses established among them. The expenses on account of the *Naval department* include all the sums paid for the wages, subsistence, &c. of the officers and men of the navy and marine corps; the salaries and wages of the persons employed in the navy yards; the sums expended for building and repairing vessels, docks and wharves, as well as for timber, naval stores, ordnance, &c. The expenditures on account of the *intercourse with foreign nations* include the salaries and outfits of ministers plenipotentiaries, consuls, agents, bearers of despatches, &c.; the monies paid for the relief and protection of American seamen; the expenses attending prize causes; as well as expenses on account of treaties with foreign powers. The expenses on account of intercourse with the *Barbary powers* include the sums paid for annuities, the salaries of consuls, and all sums expended in giving effect to treaties concluded with these powers. The expenditures of the *civil list proper* include the salaries of the President and Vice President of the United States, the secretaries and principal officers of the executive departments, and all the clerks and messengers belonging to the same; the compensation paid to members of Congress, and to the clerks and secretaries of the legislative department; the salaries of the judges of the United States courts, the marshals of the different states, the governors of territories, the officers of the mint establishment, and of the surveying department. The expenses under the head of *Miscellaneous Civil* include the payments of pensions, annuities and grants; the sums paid for the public buildings in the city of Washington, for the buildings and machinery in the mint establishment, and for the surveys of the coasts of the United States; the expenses attending the lighthouse and marine hospital establishments, &c. &c.

Questions. 1. How large a proportion of the expenditure of the United States since the establishment of the present government has been on account of the public debt? 2. How large a proportion on account of the military establishment? 3. How large, on account of the naval department? 4. How large, on account of the civil list? 5. What items are comprehended under the expenditures for the military establishment? 6. What items, under the expenditures for the Indian department? 7. the naval department? &c.

TABLE V. Showing the amount of the public debt on the 1st of January in each year, from 1791 to 1817; also the sums paid annually on account of the debt during the same period.

Years.	Amount of Debt on the 1st of January.	Sums paid on account of			
		Principal of the Public debt.	Interest of Public debt.	Charges on foreign loans	Total payments.
	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>
1791	75,169,974	2,938,512	2,090,637	258,000	5,287,549
1792	76,373,767	4,062,037	3,076,628	125,000	7,263,665
1793	77,587,997	3,047,263	2,714,293	57,948	5,819,505
1794	75,996,170	2,311,285	3,414,254	54,062	5,778,602
1795	78,149,937	2,895,260	3,136,671	52,480	6,084,411
1796	81,642,272	2,640,791	3,183,490		5,824,282
1797	80,934,023	2,492,378	3,220,043	80,000	5,792,421
1798	78,494,165	937,012	3,053,281		3,990,294
1799	77,399,909	1,410,589	3,186,287		4,596,876
1800	81,633,325	1,203,665	3,174,704		4,578,369
1801	82,000,167	2,878,794	4,396,998	4,000	7,279,792
1802	78,754,568	5,413,965	4,120,038	5,000	9,539,004
1803	74,731,922	3,407,331	3,790,113	6,000	7,203,444
1804	85,353,643	3,905,204	4,259,582	7,000	8,171,787
1805	80,534,058	3,220,890	4,140,998	8,000	7,369,889
1806	74,542,957	5,286,476	3,694,407	29,000	8,969,884
1807	67,731,645	2,938,141	3,369,578		6,307,720
1808	64,742,326	6,832,092	3,428,152		10,260,245
1809	56,732,379	3,586,479	2,866,074		6,452,554
1810	53,156,532	5,163,476	2,845,427		8,008,904
1811	47,855,070	5,543,470	2,465,733		8,009,204
1812	45,035,123	1,998,349	2,451,272		4,449,622
1813	55,907,452	7,508,668	3,599,455		11,108,123
1814	80,986,291	3,307,304	4,593,239		7,900,543
1815	99,824,410	6,638,832	5,990,090		12,628,922
1816	123,016,375	17,048,139	7,822,923		24,871,062
1817	118,822,865	*20,452,911	*6,905,760		*27,358,671
		129,049,327	101,189,140	687,290	230,925,758

* These numbers are merely estimates.

Remarks. The original debt was contracted in support of the war of independence, which lasted from 1775 to 1783. During the long peace between 1783 and 1812 the country was prosperous, and the debt was gradually reduced to about one half its original amount. The war of 1812, '13 and '14 increased it again nearly three-fold, and in 1816, when it was at its maximum, it amounted to \$123,016,375. Since 1816 the revenues arising from the importation of immense quantities of foreign goods have enabled the government to reduce it very considerably, and on the 1st of January 1821 it was \$91,294,416.

In 1791 the public debt was in the proportion of 23 dollars and 25 cents; in 1801, 18 dollars and 77 cents; in 1811, 7 dollars and 94 cents; and in 1821, 11 dollars and 28 cents for every free inhabitant of the United States. The debt at present, is therefore, much less in proportion to the population than in 1791. The debt of Great Britain divided among the inhabitants of the United Kingdom gives about 175 dollars for every individual, or on an average, more than 1,000 dollars for every family.

Questions. When was the debt of the United States at its minimum? 2. When was it at its maximum? 3. What occasioned its increase from 1812 to 1816? 4. In which three years were the largest sums paid towards its reduction? 5. How much would a division of the debt of the United States among the free population, give to each person as his share? 6. How much would a similar division of the debt of Great Britain give to each inhabitant of the United Kingdom? 7. Is the present debt of the United States as burdensome as the debt in 1791?

TABLE VI. Showing the receipts and disbursements of the Treasury during three years of war, viz. 1812, 1813 and 1814.

Receipts.					
	1812	1813	1814	Total.	Proportion.
From revenue,	9,601,132	14,340,709	11,500,808	35,642,447	36.37
- loans,	10,002,400	20,089,635	15,080,548	45,172,581	46.10
- treasury notes,	2,835,500	6,094,500	8,297,280	17,227,280	17.57
Total,	22,639,032	40,524,844	34,878,436	98,042,306	100.00
Expenditures.					
	1812	1813	1814	Total.	Proportion.
Civil & miscellaneous,	1,791,360	1,833,306	2,337,897	5,962,565	5.96
Military establishment,	12,078,773	19,802,488	20,510,238	52,391,499	52.39
Naval establishment,	3,959,365	6,446,000	7,312,899	17,718,264	17.77
Public debt,	4,449,625	11,108,123	8,388,890	23,946,625	23.94
Total,	22,279,123	39,190,917	38,549,915	100,019,955	100.00

Questions. 1. What was the whole expenditure of the United States during the three years of war with Great Britain in 1812, '13 and '14? 2. What proportion of the whole was for the military establishment? 3. What proportion, for the naval establishment? 4. What proportion of the receipts was from real revenue? 5. What proportion, from loans and treasury notes?

COLLEGES.

TABLE I. In the following table the first column shows the names of the oldest colleges in the United States ; the 2d, the year when each was incorporated ; the 3d, the number of alumni, that is, the number who have been educated at each college since its establishment ; the 4th shows how many of the alumni were ministers ; the 5th, the number of alumni living ; the 6th, the number of ministers living ; and the 7th, the date of the catalogue examined, or the period to which the statements are brought down.

1	2	3	4	5	6	7
Colleges.	When incorporated.	Alumni.	Ministers.	Alumni living.	Ministers living.	Date of Catalogue.
Harvard,	1638	4,442	1,198	1,708	285	1818
Yale,	1700	3,300	847	1,878	357	1817
Princeton,	1748	1,425	297	1,023	147	1816
Columbia,	1754	608	67			1814
Brown,	1764	829	149	715	130	1817
Dartmouth,	1769	1,190	263	992	228	1816
Dickinson,	1783	272	62	243	58	1813
Williams,	1783	473	112	434	107	1817
Union,	1794	291	33	280	32	1813
Bowdoin,	1794	85	2	80	2	1816
Middlebury,	1800	260	55	250	55	1817
South Carolina,	1802	275	5	280	5	1816
Total,		13,450	3,090	7,643	1,406	

Questions. Which is the oldest college in the United States ? 2. Which has the greatest number of alumni ? 3. Which next ? 4. Which has the greatest number of alumni living ? 5. Which has furnished the greatest number of ministers ? 6. Which has the greatest number of ministers living ?

TABLE II. Showing the number of alumni and the number of ministers at the above mentioned colleges in four distinct periods, between the first settlement of the country and the year 1810.

Periods.	Whole number of alumni.	Number of ministers.	Proportion of ministers.
100 years, viz. from 1620 to 1720.*	814	436	One half.
50 years, viz. from 1720 to 1770.	3,197	1,135	One third.
40 years, viz. from 1770 to 1810.	7,103	1,418	One fifth.
10 years, viz. from 1800 to 1810.	2,793	453	One sixth.

* For 18 years of this period no college was in existence. Harvard was not established till 1638.

Remarks. From the above table it appears that the proportion of liberally educated young men in this country who have entered the ministry has been continually diminishing for the last century. For the first century after the landing of our forefathers at Plymouth, more than one half of all the young men who were educated at our colleges entered the ministry. For the next period of 50 years the proportion was only one third. From 1770 to 1810 it was only one fifth; and during the last 10 years of this period only one sixth. Within a few years the number of students preparing for the ministry has very much increased, owing to the efforts of Education societies.

Questions. 1. What proportion of those who graduated at our principal colleges, previous to 1720, entered the ministry? 2. What proportion, of those who graduated between 1720 and 1770? 3. What proportion, of those who graduated between 1770 and 1810? 4. What proportion, of those who graduated between 1800 and 1810?

MISCELLANEOUS.

TABLE I. Showing the net revenue from the customs paid by each state in 1816; the number of representatives in Congress, to which each state is entitled, and the number of militia in 1821.

States.	Revenue.		Represent- atives.	Militia in 1821.
	Amount.	Proportion.		
	<i>Dollars.</i>	<i>per cent.</i>	<i>Number.</i>	
Maine,			7	20,990
New-Hampshire,	55,151	.19	6	27,012
Vermont,	6,135	.02	5	20,781
Massachusetts,	*4,815,924	16.00	13	48,140
Rhode-Island,	346,031	1.21	2	8,665
Connecticut,	331,514	1.16	6	22,100
New York,	9,460,760	33.19	34	121,553
New-Jersey,	25,503	.08	6	35,240
Pennsylvania,	5,495,299	19.28	26	115,231
Delaware,	5,001	.02	1	7,451
Maryland,	2,771,910	9.72	9	32,189
Virginia,	1,250,667	4.38	22	83,915
North Carolina,	244,422	.85	13	46,782
South Carolina,	1,368,711	4.80	9	23,729
Georgia,	627,392	2.20	7	29,661
Alabama,			2	11,261
Mississippi,	5,204	.02	1	5,292
Louisiana,	1,270,009	4.45	3	10,257
Tennessee,			9	36,146
Kentucky,			12	51,052
Ohio,			14	63,247
Indiana,			3	14,990
Illinois,			1	2,021
Missouri,			1	12,030
Michigan Territory,	26,598	.08		1,707
Arkansas Territory,				
District of Columbia,	464,990	1.63		
Total,	28,572,218	100.00	212	609,541

* Including Maine.

Remarks. The revenue from the customs is paid in those ports where the goods are first landed. Tennessee, Kentucky, &c. pay no revenue, because they are interior states and have no ports. New-York pays a great revenue, because the goods consumed in New-York, half of New-Jersey, and the western half of New-England are first landed in the city of New-York. Goods to a considerable amount are also transported coast-wise from New-York to the southern states. The goods consumed in the western states pay duties in Philadelphia, Baltimore, New-Orleans, &c.

Questions. 1. What proportion of the revenue from the customs in 1816 was paid by New-York? 2. What proportion, by

Pennsylvania? 3. What proportion, by Massachusetts? 4. What proportion, by Maryland? 5. Why does New-York pay so much more than the other states? 6. Why was there no revenue from the western states? 7. Where do the goods consumed in the western states pay duties? 8. Which state has the greatest number of representatives in Congress? 9. Which, next? 10. Which, next? 11. Mention all the states which have more than 10 representatives.

TABLE II. Of the Post-office establishment, showing the number of post-offices, the amount of postages, the compensation to post masters, the cost of the transportation of the mail, the incidental expenses, the nett revenue of the establishment, and the extent of post roads in miles, for each year from 1790 to 1818.

Years.	Number of post-offices.	Amount of postages.	Compensation to post masters.	Incidental expenses.	Transportation of the Mail.	Nett Revenue.	Extent of post roads.
		Dollars.	Dols.	Dols.	Dols.	Dols.	Miles.
1790	75	37,935	8,198	1,861	22,061	5,795	1,875
1791	89	46,294	10,312	3,092	23,293	9,597	1,905
1792	195	67,444	16,518	5,282	32,731	12,913	5,642
1793	209	104,747	21,646	5,660	44,731	32,707	5,642
1794	450	123,947	17,156	9,812	53,005	38,974	11,934
1795	453	160,620	30,272	12,262	75,359	42,727	13,267
1796	453	195,067	35,730	14,353	81,499	63,495	13,207
1797	554	213,993	47,100	13,623	69,382	63,884	16,150
1798	639	232,997	56,035	16,035	107,014	53,893	16,180
1799	677	264,846	63,953	14,605	109,475	76,808	16,180
1800	903	230,804	69,243	16,107	126,644	66,810	20,817
1801	1,025	320,443	79,338	23,363	152,450	65,292	22,309
1802	1,114	327,045	85,587	21,659	174,671	45,129	25,315
1803	1,258	351,823	93,170	24,084	205,110	29,459	25,315
1804	1,405	389,450	107,716	24,231	205,555	51,948	29,556
1805	1,558	421,373	111,552	26,180	239,635	41,006	31,076
1806	1,710	446,106	119,785	25,895	267,893	32,533	33,431
1807	1,848	478,763	129,041	32,093	292,751	24,878	33,755
1808	1,944	460,564	128,653	28,676	305,499		34,035
1809	2,012	506,634	141,579	23,516	332,917	8,622	34,035
1810	2,300	551,634	149,438	18,565	327,966	55,715	36,467
1811	2,403	587,247	159,244	20,639	319,166	83,148	36,467
1812	2,610	649,208	177,422	22,117	340,626	109,043	39,578
1813		703,155	221,343	20,605	433,559	22,143	39,578
1814		730,380	234,354	17,170	475,602	3,244	41,736
1815	3,000	1,013,065	241,901	18,411	487,779	294,944	43,966
1816	3,260	961,782	265,544	16,508	521,970	157,710	48,976
1817	3,459	1,002,973	303,916	23,410	589,189	86,458	51,600
1818	3,618						

Remarks. From the table it appears that the number of post-offices, the amount of postages, and the extent of post roads has increased about thirty-fold in thirty years. This great increase in the extent of the post roads has been one cause of the rapid improvement of our country. Much of the commercial prosperity of nations is owing to the despatch and safety of well regulated post-office establishments.

The post-office establishment was not intended originally as a source of revenue to the government, and as the amount of postages has increased, nearly all the surplus has been employed in the extension of the post routes, and the establishment of new post-offices. In December, 1814, however, the rates of postage were increased 50 per cent. and the revenue of 1815 was in consequence, very considerable. In February, 1816, the postage was restored to the former rates.

Questions. 1. How much has the amount of postages and the extent of post roads increased since 1790? 2. In what year was the nett revenue from the post-office establishment the greatest? 3. What was the occasion of the unusual revenue in 1815?

TABLE III. Showing the expense of building and completely equipping vessels of war, of different rates, in the United States, together with the annual expense of each when in actual service, according to the estimate of the Secretary of the Navy in 1811.

Rate.	Expense of Building.		Annual expense.
	Per gun.	Cost of each rate.	
74	4,500	333,000	211,784
60	4,500	270,000	140,000
50	4,500	225,000	115,214
44	4,500	198,000	110,000
36	4,500	162,000	102,000
32	4,000	128,000	82,000
20	3,500	70,000	50,202

GENERAL VIEWS OF EUROPE.

I. GENERAL TABLE. Showing the extent, population, density of population and chief city of the principal countries in Europe.

Countries.	Square miles.	Population.	Pop. on a sq. m.	Capital.
Norway,	161,000	930,000	6	Bergen.
Sweden,	188,433	2,407,206	13	Stockholm.
Russia,	1,891,000,	41,773,000	22	St. Petersburg.
Denmark,	21,615	1,565,000	72	Copenhagen.
Great Britain,	88,573	12,552,144	141	London.
Ireland,	32,000	6,500,000	203	Dublin.
Netherlands,	25,565	5,285,000	206	Amsterdam.
France,	200,000	29,290,370	146	Paris.
Switzerland,	19,000	1,750,000	92	Geneva.
Austria,	267,674	27,972,000	105	Vienna.
Prussia,	105,770	9,904,549	94	Berlin.
Bavaria,	31,966	3,560,000	111	Munich.
Wurtemberg,	8,118	1,395,463	172	Stuttgart.
Hanover,	15,004	1,305,351	87	Hanover.
Saxony,	7,436	1,200,000	161	Dresden.
Sardinia,	27,400	3,994,000	146	Turin.
Two Sicilies,	43,600	6,618,000	152	Naples.
Spain,	182,000	10,350,000	57	Madrid.
Portugal,	40,875	3,683,000	90	Lisbon.
Turkey,	206,000	9,600,000	46	Constantinople.

Questions. 1. Which state in Europe has the largest territory? 2. Mention the states which contain more than 100,000 square miles, in their order. 3. Mention the four principal states in the order of their population. 4. What states contain more than 7,000,000 inhabitants? 5. Which is the most thickly settled country in Europe? 6. Which is most thinly settled? 7. Which states have more than 100 on a square mile?

II. RELIGION AND GOVERNMENT. The following table shows the religion and government of the various states of Europe.

States.	Religion.	Government.
Russia,	Greek Church,	Monarchy.
Sweden,	Protestant, }	Limited Monarchy.
Norway,	Protestant, }	
Denmark,	Protestant,	Absolute Monarchy.
Great Britain,	Protestant, }	Limited Monarchy.
Ireland,	Catholic, }	
Prussia,	Protestant,	Absolute Monarchy.
Saxony,	Protestant,	Limited Monarchy.
Hanover,	Protestant,	Limited Monarchy.
Wurtemberg,	Protestant,	Limited Monarchy.
Bavaria,	Catholic,	Limited Monarchy.
Smaller German States,	Prot. and Cath.	
Austria,	Prot. and Cath.	Monarchy.
Netherlands,	Prot. and Cath.	Limited Monarchy.
Switzerland,	Prot. and Cath.	Republican.
France,	Catholic,	Limited Monarchy.
Spain,	Catholic,	Limited Monarchy.
Portugal,	Catholic,	Limited Monarchy.
Sardinia,	Catholic,	Absolute Monarchy.
Two Sicilies,	Catholic,	Monarchy.
Smaller Italian States,	Catholic,	
Turkey,	Mahometan,	Absolute Monarchy.

General Remark. The Greek Religion prevails in Russia, and the Mahometan in Turkey; in the rest of Europe the most northern countries are Protestant, the most southern, Catholic, and those in the middle partly Protestant and partly Catholic.

Questions. 1. What forms of religion are most prevalent in Europe? 2. Where does the Mahometan religion prevail? 3. Where does the Greek religion prevail? 4. Where, the Protestant? 5. Where, the Catholic? 6. What is the religion of Sweden? 7. Of Spain? 8. Of France? 9. What is the government of France? 10. Of Switzerland? 11. Of Sweden?

III. NAVY. The following table shows the naval force of all the maritime states of Europe in 1808, according to Hassel.

Countries.	Ships of the line.	Frigates.	Smaller vessels.	Total.	No. of cannon.	No. of seamen.
Great Britain,	218	234	391	972	28,000	180,000
Spain,	52	40	209	301	8,000	52,869
France.	40	30	142	212	6,000	94,236
Russia,	32	18	296	346	4,428	35,775
Turkey,	20	12	10	42	1,650	20,000
Denmark,	19	17	45	81	2,183	5,000
Holland,	16	10	50	76	1,570	6,000
Sweden,	12	8	220	240	2,760	11,406
Italian States,	4	10	29	43	600	6,000

Remarks. The navy of Great Britain in 1808 was more powerful than all the other navies in the world taken together; for the above catalogue contains all except those of the United States, and the kingdom of Brazil, both of which were very small. The navy of the United States, in 1808, contained only 10 frigates, and 80 smaller vessels, including gun-boats. The navy of Brazil consisted of 10 ships of the line, and 10 frigates. The nations of Asia and Africa have no navies.

Questions. 1. Mention the eight principal naval powers in Europe. 2. How many seamen in the British navy in 1808? 3. How many ships of the line? 4. How many frigates?

IV. CITIES. The following table shows at one view all the cities in Europe which contain more than 100,000 inhabitants.

Cities	Population	Cities.	Population
1. London,	1,011,546	15. Rome,	130,000
2. Paris,	715,000	16. Palermo,	130,000
3. Constantinople,	500,000	17. Adrianople,	130,000
4. Naples,	330,000	18. Liverpool,	120,000
5. Moscow,	300,000	19. Glasgow,	120,000
6. St. Petersburg,	285,000	20. Lyons,	120,000
7. Vienna,	240,000	21. Hamburg,	115,000
8. Lisbon,	230,000	22. Manchester,	110,000
9. Amsterdam,	230,000	23. Marseilles,	110,000
10. Dublin,	187,939	24. Venice,	109,000
11. Berlin,	182,387	25. Copenhagen,	105,000
12. Madrid	168,000	26. Edinburgh,	102,987
13. Barcelona,	140,000	27. Valencia,	100,000
14. Milan,	135,000	28. Seville,	100,000

Questions. 1. Which is the greatest city in Europe? 2. Which next? 3. What is the population of London? 4. What is the population of Paris? 5. Mention the cities which have more than 150,000 inhabitants in the order of their population?

V. FOREIGN POSSESSIONS. The following table presents at one view the foreign possessions of all the European nations, with their population and extent, so far as they have been ascertained.

GREAT BRITAIN.

	Square Miles.	Population.
I. <i>In Europe.</i>		
1. Malta, - - - - -	170	90,000
2. Gibraltar, - - - - -	-	13,000
II. <i>In Asia.</i>		
1. British India, - - - - -	476,000	53,500,000
2. Ceylon, - - - - -	38,000	1,500,000
Note. The British have a settlement also on the island of Pulo Penang, lying off the west coast of the Malay Peninsula, and another at Bencoolen on the island of Sumatra.		
III. <i>In Australasia.</i>		
1. New South Wales, - - - - -	-	25,050
2. Van Diemen's land, - - - - -	-	3,557
Note. Settlements have also been commenced recently in New Zealand.		
IV. <i>In South Africa.</i>		
The colony of the cape of Good Hope, 120,000		81,000
V. <i>In West Africa.</i>		
1. Colony of Sierra Leone, - - - - -	-	12,000
2. Bathurst, in Senegambia, - - - - -	-	1,000
3. Cape coast castle, - - - - -	-	8,000
Note. The British also maintain forts at all the important points on the Gold coast.		
VI. <i>African islands.</i>		
1. Mauritius or isle of France, - - - - -	1,300	70,000
2. St. Helena, - - - - -	50	2,000
VII. <i>In North America.</i>		
1. Newfoundland, - - - - -	-	70,000
2. Nova Scotia, - - - - -	-	100,000
3. New-Brunswick, - - - - -	-	60,000
4. Lower Canada, - - - - -	-	335,000
5. Upper Canada, - - - - -	-	83,000
6. Bermudas, - - - - -	20	10,381
VIII. <i>In the West Indies.</i>		
1. Jamaica, - - - - -	6,400	366,000
2. The Bahamas, - - - - -	5,500	14,318
3. Tortola, - - - - -	90	10,000
4. Virgin Gorda, - - - - -	80	8,000
5. Anguilla, - - - - -	30	800
6. Barbuda, - - - - -	90	1,500
7. St. Christopher, - - - - -	70	25,000
8. Nevis, - - - - -	20	11,000
9. Antigua, - - - - -	33	35,739

	Square Miles.	Population.
10. Montserrat,	47	10,750
11. Dominica,	29	25,492
12. St. Lucia,	225	16,846
13. St. Vincent,	131	24,060
14. Barbadoes,	166	81,930
15. Grenada,	109	51,363
16. Tobago,	140	16,485
17. Trinidad,	1,700	28,477

IX. In South America.

English Guiana,	111,741
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NETHERLANDS.

I. In Asia.

1. Java (part of)	25,000	2,200,000
2. Banca,	5,000	
3. Spice islands or Moluccas,		
4. Celebes,	80,000	

II. In West Africa.

Elmina, on the Gold coast,	15,000
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III. In the West Indies.

1. St. Martin,	90	6,100
2. Saba,	10	1,600
3. St. Eustatius,	22	20,000
4. Curacoa,	600	8,500

IV. In South America.

Dutch Guiana,	62,000
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FRANCE.

I. African islands,

Bourbon island,	2,500	80,346
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II. In West Africa.

1. St. Louis in Senegambia,	3,300
2. Gallam in do.	
3. Goree in do.	5,000

III. In the West Indies.

1. Guadeloupe,	675	114,839
2. Desœda,	25	900
3. Mariegalante,	90	12,385
4. Martinico,	370	96,413

IV. In South America.

French Guiana,	12,449
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PORTUGAL.

I. *In West Africa.*

The Portuguese have several forts and factories for carrying on the slave trade, on the coast of Congo. The capital of them all is the city of Loando St. Paul, which contains 18,900 inhabitants.

II. *In East Africa.*

The Portuguese have several small settlements and forts on the coasts of Mozambique and Sofala. The capital of them all is the city of Mozambique, which contains 2,800 inhabitants.

Square Miles. Population.

III. *African islands.*

1. Madeira,	-	-	-	-	-	1,100	90,000
2. Cape Verde islands,	-	-	-	-	-	-	40,000
3. Annobon,	-	-	-	-	-	-	4,000
4. St. Thomas,	-	-	-	-	-	-	18,000
5. Prince's island,	-	-	-	-	-	-	-
6. The Azores,	-	-	-	-	-	-	160,000

IV. *In South America.*

Brazil,	-	-	-	-	-	2,200,000	2,400,000
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SPAIN.

I. *In Asia.*

The Philippine islands,	-	-	-	-	-	-	1,500,000
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II. *In Polynesia.*

The Caroline islands,

III. *African islands.*

The Canaries,	-	-	-	-	-	-	160,000
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IV. *In the West Indies.*

1. Cuba,	-	-	-	-	-	54,000	432,000
2. Spanish St. Domingo,	-	-	-	-	-	-	125,000
3. Porto Rico,	-	-	-	-	-	4,140	100,000

DENMARK.

I. *In Europe.*

1. Iceland,	-	-	-	-	-	40,000	48,000
2. The Faroe islands,	-	-	-	-	-	550	5,209

II. *In North America.*

Greenland,	-	-	-	-	-	-	14,000
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III. *In the West Indies.*

1. St. Thomas,	-	-	-	-	-	40	5,050
2. St. John's	-	-	-	-	-	40	2,430
3. St. Croix,	-	-	-	-	-	100	31,387

SWEDEN.

		<i>Square Miles. Population.</i>	
<i>In the West Indies.</i>			
St. Bartholomew,	- - - -	60	8,000

RUSSIA.

<i>I. In Asia.</i>			
Russia in Asia,	- - - -	4,946,000	2,697,000
<i>II. In North America.</i>			
Russian settlements,	- - - - -	-	50,000

TURKEY.

<i>I. In Asia.</i>			
Turkey in Asia,	- - - -	500,000	12,000,000
<i>II. In Africa.</i>			
Egypt,	- - - - -	190,000	2,500,000

Questions.] 1. What possessions has Great Britain in North America? 2 What possessions has she in South America? in the West Indies? in Africa? in Asia? in Europe? 3. What possessions has Spain in the W. Indies? in Asia? 3. To what nation does Iceland belong? 4. To what nation the Azores? Madeira? Greenland? Egypt? Java? the Canaries? &c.

GENERAL VIEWS OF THE WORLD.

I. EXTENT AND POPULATION. The following table shows the extent, population, and density of population of the grand divisions of the earth, according to Hassel.

<i>Grand Divisions.</i>	<i>Square Miles.</i>	<i>Population.</i>	<i>Population on a square mile.</i>
Europe,	3,387,109	180,000,000	53
Asia,	16,728,002	380,000,000	32
Africa,	11,652,442	99,000,000	8
America,	16,504,254	21,000,000	1
Australasia, &c.	4,164,420	2,000,000	$\frac{1}{2}$
Earth,	52,436,137	682,000,000	13

Questions. 1. Which is the largest division of the globe? 2. Which next? 3. Which is the smallest? 4. Which contains the greatest population? 5. Which is most thickly settled? 6. Which is most thinly settled? 7. What is the population of the world according to Hassel? 8. What is the population of Europe? 9. How many million square miles in Europe? 10. How many in Asia? 11. How many in America?

GENERAL VIEWS OF THE WORLD.

II. MOUNTAINS. The following table shows, at one view, the height of the most celebrated mountains and other objects in the world, above the level of the sea.

<i>Mountains.</i>	<i>Country.</i>	<i>Height in feet.</i>
walagiri, the highest peak of the Himalah mountains,	Tibet,	27,550
Highest flight of a balloon,		22,900
Amborazo, the highest peak of the Andes,	New Granada,	21,440
Best flight of the Condor,		21,000
Best spot where man ever trod,	New Granada,	19,300
volcano,	New Granada,	18,696
Peak in the Pacific ocean,	Owhyhee,	18,400
Pico de las neves, highest peak in North America,	N. W. coast,	17,850
Pico de Orizaba, highest mountain in Mexico,	Mexico,	17,720
Lowest limit of perpetual snow under the equator,		15,207
Mount Fairweather, in North America,	N. W. coast,	14,900
Mont Blanc, highest mountain in Europe,	Italy,	14,676
Summit of Merapi,	Sumatra island,	13,482
Spot inhabited by man,		13,435
Mount Rosa, a summit of the Alps,	Switzerland,	13,428
Highest summit of the Atlas mountains,	Morocco,	13,000
Highest limit of pines under the equator,		12,800
of Teneriffe,	Canaries,	12,176
San Pedro, a volcano,	Sicily,	10,954
Mont Cenis, a highest summit of the Pyrenees,	France,	10,578
Highest limit of oaks under the equator,		10,500
Mount St Bernard, a summit of the Alps,	Switzerland,	10,280
23. Mount Lebanon,	Syria,	10,200
24. Mount St. Gothard, a summit of the Alps,	Switzerland,	9,964
25. The city of Quito,	New Granada,	9,510
26. Mount Ararat,	Armenia,	9,500
27. Peak of Lomnitz, highest of the Carpathian range,	Hungary,	8,316
28. Mont Velino, highest of the Appennines,	Italy,	8,300
29. Mount Pico, highest in the Azores,	Azores,	7,016
30. Mount Washington, highest in the United States,	New Hampshire,	6,634
31. Olympus,	Greece,	6,000
32. Mount Hecla, a volcano,	Iceland,	5,000
33. Ben Nevis, highest in Great Britain,	Scotland,	4,350
34. Table mountain,	South Carolina,	4,300
35. Mansfield mountain, highest of the Green mountains,	Vermont,	4,279
36. Saddleback, highest in Massachusetts,	Massachusetts,	4,000
37. Round Top, highest of the Catskill mountains,	New York,	3,804
38. Vesuvius, a volcano,	Italy,	3,600
39. Snowdon, highest in Wales,	Wales,	3,517
40. The pyramids, the loftiest work of man,	Egypt,	500

Questions. 1. Which is the highest mountain in the world? 2. Which is the highest in America? 3. What is the height of Chimborazo? 4. Which is the highest mountain in Europe? 5. What is the height of Mont Blanc? 6. Which is the highest mountain in the United States? 7. What is the height of Mount Washington? 8. Which is the highest mountain in Great Britain? 9. What is the height of Ben Nevis? 10. What is the height of Mount Etna? 11. Of Vesuvius? 12. Did a balloon ever ascend as high as Chimborazo? 13. Did a Condor ever fly as high? 14. How high is the highest spot of earth ever trod by man? 15. How high on the sides of mountains will pines grow under the equator? 16. How high above the level of the sea is the city of Quito? 17. How high are the pyramids?

III. COMMERCE. The following table exhibits at one view the principal exports of the various countries of the world, arranged in geographical order.

<i>Countries.</i>	<i>Exports.</i>
Greenland,	Whale oil and whale bone, the produce of the fishery.
Hudson's Bay,	Furs, purchased from the Indians.
Newfoundland,	Cod-fish, caught near the shore, and on the banks.
Canada,	Flour, pot and pearl ashes, and furs.
Nova Scotia,	Lumber, fish, and plaster of Paris.
New England,	Lumber, beef, pork, fish, pot and pearl ashes.
Middle States,	Wheat, flour, and from Maryland tobacco.
Southern States,	Cotton, to an immense amount, tobacco and rice.
Mexico,	Silver and gold to an immense amount.
Bay of Campeachy,	Logwood.
West Indies,	Sugar, rum, molasses; coffee, cotton and indigo.
Caraccas,	Cacao, the chief ingredient in chocolate; indigo, coffee and tobacco.
Guliana,	Sugar, rum, cotton and coffee.
Brazil,	Cotton, sugar, coffee, tobacco and dye-woods, from the northern provinces; gold and diamonds, from the middle; wheat, hides and tallow, from the southern.
Buenos Ayres,	Silver and gold, hides, beef and tallow.
Chili,	Silver, gold and copper, from the northern provinces; wheat and hemp from the southern.
Peru,	Silver and gold.
Columbia river,	Furs, procured from the Indians.
Northwest coast,	Furs, procured from the Indians.
Kamtschatka,	Furs.
Japan,	Silk and cotton goods, japan ware and porcelain.
China,	Tea, silk goods, cotton goods, and porcelain ware.
Asiatic islands,	Pepper, cloves, ginger, nutmegs and camphor.
Birman empire,	Teak timber.
Hindoostan,	Cotton goods, sugar, cotton, diamonds, indigo and saltpetre.
Persia,	Beautiful carpets.
Arabia,	Coffee, aloes, myrrh and frankincense.
East Africa,	Slaves, gold, ivory, gums, myrrh and frankincense.

<i>Countries.</i>	<i>Exports.</i>
Cape of Good Hope,	Wine and brandy.
West Africa,	Slaves, gold, ivory, gums, wax and hides.
Morocco,	Leather, goat-skins, gum and fruits.
Medeira, and the Canaries,	Wine.
Algiers and Tripoli,	Ostrich feathers, wax, hides, dates, wool.
Egypt,	Rice, linseed, grain and fruits.
Turkey,	Carpets, muslins, swords, corn, wine and fruits.
Italy,	Silks, wine, corn, oil and fruits.
France,	Silks, woollens, linens, wines and brandy.
Spain,	Silk, wool, wine, olive oil, fruits and salt.
Portugal,	Wine, salt, wool and fruits.
Netherlands,	Fine linen, laces, woollens, and other manufactures.
Germany,	Linens, various manufactures, and corn.
Denmark,	Corn, fish, horses and live hogs.
Russia,	Hemp, sail cloth, tallow, iron, corn and furs.
Sweden,	Iron, lumber, copper, train oil and her- rings.
Norway,	Lumber, fish, hides and copper.
Great Britain,	Woollens, cottons, iron ware, tin and ele- gant earthen ware.
Ireland,	Linen, beef, tallow, butter and hides.

Remarks. Manufactured goods come from thickly settled countries, as China, India, Japan, Great Britain, and the Netherlands. Thinly settled countries commonly export raw materials, the produce either of agriculture, mines, or the forest. The best furs come from cold climates. They are exported from the northern parts of Asia, Europe, and America. Sugar, cotton, coffee, spices, wine, &c. require a hot climate.

Questions. 1. What countries export silver? 2. What countries export gold? 3. What countries export furs? 4. What countries, sugar, rum and molases? 5. What countries export cotton? 6. Woollen goods? 7. Cotton goods? 8. Laces? 9. Silk goods? 10. Sail cloth? 11. Where do the most beautiful carpets come from? 12. What countries export tin? 13. Iron? 14. Diamonds? 15. Tea? 16. Porcelain? 17. What articles are exported from Great Britain? 18. What, from Mexico? 19. What, from China? 20. from Kamtschatka? 21. from the West Indies? 22. from the Cape of Good Hope? 23. from Madeira? 24. from the Northwest coast of America? 25. from the southern provinces of Brazil?

IV. PROTESTANT MISSIONS TO THE HEATHEN. The following table shows at one view the various societies of Protestants engaged in supporting missions to the Heathen. The first column gives the name of the society; the second, the country in which it is instituted; the third, the year in which it commenced operations; and the fourth, the number of missionaries and teachers in its employ, stated generally for 1819.

	Country.	Year.	Mis.
1. Christian Knowledge Society,	England,	1701	8
2. Danish Mission College,	Denmark,	1715	2
3. United Brethren,	Germany,	1732	85
4. Methodist Missionary Society,	England,	1786	65
5. Baptist Missionary Society,	England,	1792	72
6. London Missionary Society,	England,	1795	84
7. Scotch Missionary Society,	Scotland,	1796	12
8. Church Missionary Society,	England,	1800	74
9. American Board of Foreign Missions,	United States,	1810	31
10. Baptist Board of Foreign Missions,	United States,	1814	3
11. United Foreign Missionary Society,	United States,	1817	3
Total,			440

Remarks. Besides the 440 missionaries and teachers, above enumerated, there are farmers, mechanics, physicians, and the wives and children of the missionaries, who are supported in whole, or in part, from the funds of the Societies. The United Brethren, sometimes called Moravians, are about 16,000 in number. They live principally in Germany. The United Foreign Mission Society is composed of the Presbyterian, Dutch Reformed, and Associate Reformed churches. The other names explain themselves.

According to the above statement, England supports 303 missionaries; Germany 85; the United States, 37, &c.

Questions. 1. In what countries are Societies established for sending Missionaries to the Heathen? 2. What are the names of the Missionary Societies in England? 3. Which is the oldest Foreign Mission Society in the United States? 4. When did it commence its operations? 5. Which Societies employ most Missionaries? 6. When did the United Brethren commence their missionary labors? 7. When was the London Missionary Society established? 8. What is the whole number of Protestant Missionaries to the Heathen? 9. How many of these are supported by England? 10. How many by the United States?

V. The following table shows the countries in which the missionaries are stationed, stated generally for 1819.

Country.	Number of missionaries.	Country.	Number of missionaries.
West Africa,	17	Ceylon,	22
South Africa,	33	Asiatic islands,	6
Mauritius island,	1	New Zealand,	5
Madagascar,	1	Society islands,	16
Malta,	3	Sandwich islands,	8
Ionian islands,	1	Guiana,	14
Palestine,	2	West Indies,	75
Constantinople,	1	Cherokee Indians,	8
Russia in Asia,	13	Choctaw Indians,	6
Tibet,	1	Osage Indians,	3
China,	1	Delawares and Chippewas,	2
Farther India,	10	Labrador,	19
Hindoostan,	151	Greenland,	11
			Total,
			440

Remarks. The missionaries in Hindoostan are principally Baptists and English Episcopalians. Those in the West Indies are Methodists and United Brethren. Those in South Africa were sent out principally by the London missionary society. Several of the Missionaries in Ceylon were sent out by the American Board, but most of them are Methodists. Those in Labrador and Greenland are exclusively United Brethren. More than half of the missionaries in South Africa, and all those in the Society islands, are employed by the London Missionary society. The missionaries of the American Board are in the Sandwich islands, among the Cherokee and Choctaw Indians, in Hindoostan and Ceylon.

Questions. 1. What country contains the greatest number of Protestant missionaries? 2. Of what denomination are the missionaries in Hindoostan? 3. What society employs most missionaries in South Africa? 4. Of what denomination are the missionaries in Labrador and Greenland? 5. Where are the missionaries of the Scotch Missionary society employed? 6. Where are the missionaries of the American Board of Foreign Missions employed? 7. What Society sent out the missionaries to the Society islands?

WINDS. In the temperate and frigid zones the winds are variable, blowing irregularly, sometimes from one point of the compass, and sometimes from another. But in the torrid zone they are very regular. In all parts of the Atlantic and Pacific oceans which lie in the torrid zone, except near shore, the winds blow constantly at all seasons of the year from the east. Under the equator they are due east; as you approach towards the northern tropic they incline to northeast, and towards the southern tropic, to southeast. These winds are called the trade winds.

winds, because they much facilitate trading voyages. The Spanish flotillas, which sail annually from Acapulco, on the western coast of Mexico, to the Philippine islands, are borne along by the trade winds with uninterrupted prosperity; no attention, no skill, is required to steer them; no accident ever befalls them; and this voyage of nearly half the circumference of the globe, is often performed in sixty days, without a change of sails. It is impossible ever to return by the same track.

In the Indian Ocean the regular trade wind prevails between the southern tropic and the 10th degree of south latitude; but to the north of this last boundary, begins the empire of the monsoons. For six months, from April to October, a strong wind blows constantly from the southwest, bringing with it rain and tempest; during the rest of the year, a dry and agreeable wind blows from the northeast. The change from one monsoon to the other is accompanied with violent storms and hurricanes.

All the islands between the tropics are refreshed by the sea and land breeze. During the day a breeze always blows from the sea; but at night it changes, and blows from the land.

Questions. 1. In what part of the world are the winds variable? 2. In what part are they regular? 3. In what direction do the trade winds blow? 4. Where do the trade winds prevail? 5. Which is the easiest voyage, from Mexico to the Philippine islands, or from the Philippine islands to Mexico? 6. In what direction do the monsoons blow? 7. Where do the monsoons prevail? 8. What is the state of the weather during the southwest monsoon? 9. How is the weather during the northeast monsoon? 10. What is the weather during the change of the monsoons? 11. Which way does the wind blow on the islands of the torrid zone during the day? 12. Which way during the night?

CURRENTS. The great currents of the ocean generally run from east to west, following the course of the trade winds. In passing, however, along the shores of continents and islands, they are often diverted from their natural course. Thus the great current which comes across the Atlantic ocean, proceeds between South America and the West India islands into the gulf of Mexico, and then rushes out with great velocity between Cuba and Florida, and proceeds north along the coast of the United States, and northeast as far as the shores of Iceland and Great Britain. This current is called the Gulf Stream. There is a current which comes from the Frozen ocean between Norway and Greenland, and passes along the western coast of Great Britain, into the English channel. It then turns east, and rushes through the straits of Dover into the North sea. In the Pacific, Indian, and Southern Atlantic oceans, the currents, with few exceptions, run from east to west.

Questions. 1. In what direction do the currents of the ocean generally run? 2. What occasions a deviation from this course in some instances? 3. Describe the course of the Gulf Stream. 4. What is the course of the current which comes from the Frozen ocean between Norway and Greenland.

VOLCANOES AND EARTHQUAKES. Volcanoes are burning mountains, with apertures, out of which are thrown with dreadful explosions, ashes, smoke, mud, fire, red hot stones, and lava. More than 200 volcanoes have been discovered, scattered over the surface of the earth, and there are probably many others in parts not yet explored. They may be compared to chimneys, through which the immense fires which rage in the bowels of the earth find vent. The most celebrated volcanoes are Mount Etna, in Sicily; Vesuvius, in Italy; and Hecla, in Iceland. The lofty peaks of the Andes in South America are one row of volcanoes, extending through New Grenada, Peru and Chili. The most terrible eruption of a volcano on record, is that which happened in 1845, in Sumbawa, one of the Sunda islands. The explosions were heard at the distance of more than 900 miles, and the ashes fell in such quantities, as to produce utter darkness, at the distance of 350 miles.

Earthquakes are the effect of the same subterranean fires which occasion volcanoes, and usually occur at the same time. They are commonly preceded by a general stillness in the air; the shock comes on with a rumbling noise, like that of carriages or of thunder; the ground heaves or rocks from side to side. A single shock seldom lasts more than a minute, but the shocks frequently succeed each other at short intervals for a considerable time. Awful chasms are often made, from which water bursts forth, and sometimes flames. The chasms are sometimes so wide as to overwhelm whole cities at once. Often the earth opens and closes again, swallowing up some people entirely, and squeezing others to death. Sometimes men have been swallowed up in one chasm, and thrown out alive by another. Sometimes houses and farms are carried to the distance of half a mile, and every thing left standing. Sometimes whole islands are sunk in the ocean, and new ones are raised. In 1755, the city of Lisbon was almost wholly destroyed by a great earthquake which extended over a considerable part of the globe.

Questions. 1. What are volcanoes? 2. What do they discharge? 3. How many volcanoes have been discovered? 4. Which are the most celebrated volcanoes in the world? 5. Where was the volcano which produced so terrible an eruption in 1815? 6. How far were the explosions heard? 7. How far was total darkness produced by the fall of the ashes? 8. What are earthquakes occasioned by? 9. How are they usually preceded? 10. What does the noise resemble? 11. How long do the shocks last? 12. What are some of the effects of an earthquake?

METALS AND MINERALS. *Gold* is usually found in a perfectly pure state, at the foot of large ranges of mountains, from which it is washed down by the rivers. The countries which furnish the most gold are Brazil, Peru, Mexico, East and West Africa, and the islands of Sumatra, Borneo, and Celebes.

Silver. By far the richest silver mines in the world are those of Mexico and Peru. In the course of three centuries, it is estimated that they have yielded 316,000,000 lbs. of pure silver. More than nine-tenths of all the silver in the world comes from the mines of Spanish America.

Iron, the most useful of the metals, is very generally diffused. The iron mines which are most extensively wrought are in Great Britain and France. The following table shows the estimated annual produce of iron mines in different parts of the world.

Country.	Quintals.
1. Great Britain,	8,000,000
2. France,	4,500,000
3. Russia,	1,675,000
4. Sweden,	1,500,000
5. Austria,	1,010,000
6. United States,	480,000
7. All other countries,	1,015,000
<hr/>	
Total,	15,180,000

Copper. Great Britain produces more copper annually than all the rest of Europe. This metal occurs also in Norway, Sweden, Austria, and many other parts of the world.

Lead. Great Britain produces more lead annually than all the rest of Europe. There are lead mines also in France, Germany, Austria, Spain and the United States.

Tin is of less frequent occurrence. The principal mines in the world are in Cornwall in Great Britain. It is found also in Saxony and Spain; and Banca, a small island near Sumatra, is almost entirely composed of it.

Quicksilver. There are no mines of quicksilver of any importance, except those of Almaden in Spain, Idria in Austria, and Guancavelica in Peru.

Questions. 1. Where is gold usually found? 2. What countries produce it in greatest abundance? 3. Where are the richest silver mines in the world? 4. How large a portion of all the silver in the world comes from Spanish America? 5. What country contains the most extensive iron mines? 6. What four countries yield the greatest quantity of iron? 7. What country produces most lead? 8. Where are the principal tin mines in the world? 9. What island in the East Indies contains tin in great quantities? 10. Where are the quicksilver mines?

VEGETABLES. The number, size, and luxuriance of vegetables are greatest in the torrid zone, and diminish as you go toward the poles. Our hemisphere may be divided, as respects vegetables, into four parts, the *torrid zone*, the *southern part of the temperate zone*, the *northern part of the temperate zone*, and the *frigid zone*.

1. Among the most remarkable vegetable products of the torrid zone are, the *sago palm*, which yields a juice so thick and nutritious, that it is used for food ; the *bread fruit tree* and *plantain*, which produce a fruit resembling bread ; the *teak* of India, which is used for ship-building, and surpasses even the oak in firmness and durability ; the mighty *Baobab*, which grows on the banks of the Senegal, and attains a circumference of 60 and 70 feet ; and the *great fan palm* of India, one leaf of which will cover ten or a dozen men. *Mahogany*, *logwood*, the *cinnamon*, the *clove*, the *nutmeg*, *myrrh*, *balsam* and *frankincense* grow only in the torrid zone.

2. The most important vegetables in the southern part of the temperate zone are, the *vine*, from the fruit of which wine is made ; the *mulberry*, which affords the means of making silk ; the *olive*, which subserves many agreeable purposes ; *wheat* and *barley*, the grains which yield the most nutritious bread.

3. The northern part of the temperate zone comprehends, among other regions, Britain, a great part of Germany, of Russia, New-England and the adjacent British provinces. Wheat grows with difficulty in the higher latitudes of this climate ; but *oats*, *hemp* and *flax* are raised in perfection. The *pastures* are rich and verdant ; and the forests are fine, yielding the *oak*, the *ash*, the *elm*, &c. This region is little favored by nature, but is inhabited by the most active, enterprising, and industrious body of men on earth.

4. In the frigid zone, and even as low as the parallel of 60°, nature assumes a gloomy and desolate aspect. The *pin*es and *firs* rear their tall heads, and cover the hills with their constant mantle of dark green. In proceeding towards the north, every species of vegetable which yields food to man entirely fails ; and nothing appears but dwarf trees, and a few scattered bushes.

Questions. 1. In what zone do spices grow ? 2. What zone is most favorable for the vine ? 3. What zone is most favorable for wheat and barley ? 4. In what zone are the pastures richest ? 5. What zone is best for oats, hemp and flax ? 6. What zone contains the most enterprising and industrious men ? 7. What vegetables grow in the frigid zone ? 8. What is the teak used for ? 9. What is the sago palm valuable for ? 10. What tree affords the means of making silk ? 11. Where does the Baobab grow, and what is its greatest circumference ?

ANIMALS. The torrid zone is as luxuriant in its animals as in its vegetables. The mighty *elephant* here dwells in the depth of ancient forests, while the *rhinoceros* and the *hippopotamus* roll their enormous bulk along the banks of the streams. The most ferocious animals in this zone are the *lion*, the *tiger*, the *leopard*, the *panther*, the *ounce*, and the *hyana*. Here also is the gentle and beautiful *antelope*, and the useful *camel*, without whose aid the deserts would be impassable. This burning zone generates swarms of *reptiles* and *serpents* of an enormous size. *Crocodiles* and *alligators* fill all the great rivers, and are ready to devour the unwary passenger. The largest birds are the *ostrich*, the *cassowary*, and the *condor*. The insects are inconceivably numerous. The *locusts* and *flies* move in such close and immense armies as to lay waste the earth and drive nations before them. Among the marine insects are the *corals*, animals insignificant in themselves, but remarkable for the effects which they produce. They have stony cases which remain after the death of the animal, and gradually accumulating and adhering to each other, at length form large rocks and even islands. The Pacific ocean, from New-Holland to the Friendly islands, is entirely a coral sea, and navigators are in perpetual danger of striking against rocks of this substance. New-Holland is in a manner walled round with coral rocks, which render the navigation very dangerous.

In the temperate zone there are very few monstrous or ferocious animals; but the *horse*, the *ox*, the *sheep*, and other valuable domestic animals are found in great perfection nearly to the 60th degree of latitude.

As we approach the 60th degree of latitude, the country, almost deserted by man, is covered with the *elk*, the *martin*, the *sable*, the *beaver*, the *ermine*, animals protected from the cold with a covering of rich and beautiful fur, which is eagerly sought after by man for purposes of comfort and luxury, and hence these frozen countries have become the region of an extensive fur trade. The most useful domestic animal in this climate is the *reindeer*.

In the frigid zone the quadruped species again assume a fierce and formidable character. The *bear* stalks horrid amid his frozen solitude, and fiercely defends it against the daring approach of man. But the great scene of life over the polar regions is in the ocean. It is here that the mightiest of the animal creation, the enormous *whale*, rolls through the sea, and mingles his frightful roarings with the sound of the tempest. Besides these lords of the ocean, the Northern seas swarm with *herrings*, which, during the winter, proceed in vast shoals to the seas of the temperate zone, where they afford the foundation of valuable fisheries.

Questions. 1. What are some of the largest animals in the torrid zone? 2. Which are the most ferocious? 3. Of what use is the camel? 4. What ferocious animals inhabit the rivers of the torrid zone? 5. Which are the largest birds? 6. What ef-

fect is produced by the locusts? 7. What effect is produced by the corals? 8. What parts of the world are troubled with the corals? 9. What animals flourish in the temperate zone? 10. What animals are found near the 60th degree of latitude? 11. What parts of the world produce the best furs? 12. What ferocious animal inhabits the frigid zone? 13. What remarkable fish in the polar seas?

TEMPERATURE. The two leading causes which affect the temperature of any region are distance from the equator, and elevation above the level of the sea. In proportion as you go from the equator towards the poles the cold increases, and in proportion as you ascend above the level of the sea the cold increases. Hence, under the equator, low countries are excessively hot and unhealthy, but regions elevated 6,000 or 8,000 feet enjoy a delightful temperature, while, at 13,000 or 14,000 feet, the climate is the same as in the frozen zone, and at 15,000 feet is the region of perpetual congelation, where ice never melts, and all mountains are covered above this height with eternal snow. The following table shows the mean temperature at the level of the sea, in all the successive latitudes, and the height at which perpetual congelation takes place.

<i>Latitude.</i>	<i>Mean Temperature.</i>	<i>Perpetual Congelation.</i> <i>Feet.</i>
0	84° 2'	15,207
10	82° 6'	14,764
20	78° 1'	13,478
30	71° 1'	11,484
40	62° 6'	9,001
50	53° 6'	6,334
60	45° 0'	3,818
70	38° 1'	1,778
80	33° 6'	457
90	32° 0'	0

Questions. 1. What are the two leading causes which affect the temperature of any place? 2. In ascending a lofty mountain does the climate become warmer or colder? 3. What is the climate of low countries in the torrid zone? 4. What is the climate of places near the equator, which are elevated 6,000 or 8,000 feet above the level of the sea? 5. What is the climate at the height of 15,000 feet under the equator? 6. What is the climate at 9,000 feet in the latitude of 40°? 7. How high must a mountain rise in latitude 80° before its top will be covered with perpetual snow? 8. What is the mean temperature at the level of the sea, under the equator?

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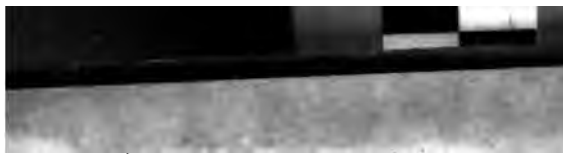
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